



SOIL SAMPLING RESULTS

FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA;

BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342;

RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA;

AND BUILDING 228 AREA

WHITTAKER CORPORATION

BERMITE DIVISION

22116 WEST SOLEDAD CANYON ROAD

SANTA CLARITA, CALIFORNIA

DELTA PROJECT NO. 40-90-038



Delta
Environmental
Consultants, Inc.

3300 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085
FAX:916/638-8385

April 2, 1991

Mr. Alan Sorsher
Toxic Substances Control Division
California Department of Health Services
1405 North San Fernando Boulevard, Suite 300
Burbank, California 91504

Subject: Soil Sampling Results for Miscellaneous Solid Waste Management Units
Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038

Dear Mr. Sorsher:

Delta Environmental Consultants, Inc. (Delta), on behalf of our client Whittaker Corporation is submitting the soil sampling results for the miscellaneous solid waste management units as requested in Count 14, Items 2, 3a, and 3c of the California Department of Health Services (DHS) Report of Violations and Schedule of Compliance, dated July 31, 1990:

The sampling and analyses were completed in accordance with the work plan submitted on March 23, 1990, to and approved by DHS in a letter dated December 10, 1990, from Mr. Alan Sorsher.

The purpose of the soil sampling and chemical analysis was to determine whether significant levels of hazardous waste constituents were present in the soils at the former old lead azide building sump and drainage area; former Building 110 sump, drainage area, and pond 342; ravine below the phosphorous stabilizing area and the area around the former Building 228.

Mr. Alan Sorsher

April 2, 1991

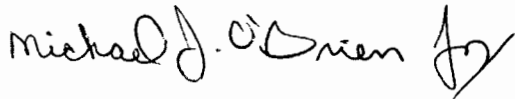
Page 2

It is Delta's opinion that the concentrations of metals detected in the soils at the miscellaneous solid waste management units pose no threat to the environment or human health, and that no further action is required at these units.

If you have any questions regarding the report, please call me at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.



Barbara J. Mickelson, P.E.
District Manager

BJM:ria
Enclosure

cc/enc: Mr. Edward R. Muller, Whittaker Corporation
Mr. Glen AbdunNur, Whittaker Corporation, Bermite Division
Mr. Ron Haussman, Tuttle & Taylor
[REDACTED] U.S. Environmental Protection Agency
Mr. Anastacio Medina, Los Angeles County Hazardous Waste Program
Mr. Andrew Hollbrook, California Regional Water Quality Control Board,
Los Angeles Region
Mr. David W. Hogan, City of Santa Clarita
Mr. Brian Lewis, California Department of Health Services

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA;
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342;
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA;
AND BUILDING 228 AREA

WHITTAKER CORPORATION
BERMITE DIVISION
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA, CALIFORNIA
DELTA PROJECT NO. 40-90-038

Prepared by:
DELTA ENVIRONMENTAL CONSULTANTS, INC.
3330 Data Drive, Suite 100
Rancho Cordova, California 95670
(916) 638-2085

April 5, 1991

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Purpose	1
1.2 Scope of Work	1
2.0 SOIL SAMPLING RESULTS	3
2.1 Old Lead Azide Building Sump and Drainage Area	3
2.2 Building 110 Sump, Drainage Area, Former Pond 342 Area, and Background	3
2.3 Ravine Below the Phosphorous Stabilizing Area	4
2.4 Building 228 Area	6
2.5 Background	8
3.0 SUMMARY AND DISCUSSION	8
3.1 Old Lead Azide Building Sump and Drainage Area	8
3.2 Building 110 Sump, Drainage Area, Pond 342 Area, and Background Area	9
3.3 Ravine Below the Phosphorous Stabilizing Area	9
3.4 Building 228 Area	10
4.0 REMARKS/SIGNATURES	11

Tables

TABLE 1	Results of the Chemical Analysis for Total Lead for Soil Samples Collected at the Former Old Lead Azide Building Sump and Drainage Area
TABLE 2	Results of the Chemical Analysis for Chloride For Soil Samples Collected at the Former Building 110 Sump, Drainage Area, and the Former 342 Pond Area
TABLE 3	Results of the Chemical Analysis for Chloride for a Soil Sample Collected at a Background Location
TABLE 4	Field Screening Results of the Area Above the Phosphorous Area With an Organic Vapor Analyzer
TABLE 5	A Summary of the Results of the Chemical Analyses for California Assessment Manual Metals for Soil Samples Collected on December 13, 1990, From an Area in the Ravine Below the Phosphorous Stabilizing Area
TABLE 6	Field Screening Results for the Area Near Building 228 With the Organic Vapor Analyzer
TABLE 7	A Summary of the Results of the Chemical Analyses for California Assessment Metals for Soil Samples Collected on December 13, 1990, From the Area Near Building 228
TABLE 8	Mean, Standard Deviation, and Range of Background Area Metal Concentrations

TABLE OF CONTENTS-Continued

Figures

- FIGURE 1 Site Location Map
- FIGURE 2 Location of Soil Borings at the Old Lead Azide Building and Building 228
- FIGURE 3 Location of Soil Borings at the Building 110 Area, Pond 342, and Background and Ravine
- FIGURE 4 Cell Locations at the Ravine Below the Phosphorous Stabilizing Area
- FIGURE 5 Cell Locations at the Building 228 Area
- FIGURE 6 Soil Sampling Locations at the Background Area

Appendices

- APPENDIX A Soil Sampling Procedures
- APPENDIX B Soil Boring Logs
- APPENDIX C Laboratory Data Sheets for the Soil Samples Collected
at the Old Lead Azide Building Sump and Drainage Area
- APPENDIX D Laboratory Data Sheets for the Soil Samples Collected
at the Building 110 Sump, Drainage Area, Former Pond 342 Area, and Background Area
- APPENDIX E Laboratory Data Sheets for the Soil Samples Collected
From the Ravine Below the Phosphorous Stabilizing Area
- APPENDIX F Laboratory Data Sheets for the Soil Samples Collected From the Building 228 Area
- APPENDIX G Summary of the Results of the Chemical Analyses for
California Assessment Manual Metals for Background Soil Samples

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA;
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342;
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA;
AND BUILDING 228 AREA

WHITTAKER CORPORATION
BERMITE DIVISION
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA, CALIFORNIA
DELTA PROJECT NO. 40-90-038

1.0 INTRODUCTION

Delta Environmental Consultants, Inc. (Delta), has been authorized by Whittaker Corporation, Bermite Division, to prepare this soil sampling report in response to Count 14, Items 2, 3a, and 3c of the California Department of Health Services (DHS) Report of Violations and Schedule of Compliance, dated July 31, 1990, for the Bermite facility near Santa Clarita, California (Figure 1).

1.1 Purpose

The purpose of the soil sampling and chemical analysis was to determine whether significant levels of hazardous waste constituents were present in the soils at the former old lead azide building sump and drainage area; former Building 110 sump, drainage area, and pond 342; ravine below the phosphorous stabilizing area; and the area around the former Building 228.

1.2 Scope of Work

The work described herein was completed in accordance with the *Work Plan* submitted on March 23, 1990, to and approved by DHS in a letter dated December 10, 1990, from Mr. Alan Sorsher. The following scope of work was performed to accomplish the objective outlined above.

Old Lead Azide Building Sump and Drainage Area

- Drilled one soil boring adjacent to the former sump to a total depth of 10 feet below the ground surface. Collected two soil samples from the soil boring at depths of 5.5 and 10 feet below the ground surface for chemical analysis of total lead by U.S. Environmental Protection Agency (EPA) Method 7420.
- Drilled one soil boring approximately 15 feet downgradient (southwest) of the former sump location to a depth of 10 feet below the ground surface. Collected two soil samples from the soil boring at depths of 5.5 and 10 feet below the ground surface for chemical analysis of total lead by EPA Method 7420.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 2

Building 110 Sump, Drainage Area, Pond 342 Area, and Background

- Drilled one soil boring in the area identified by a Bermite employee as the former sump location to a total depth of 10 feet below the ground surface. Collected one soil sample from the soil boring at a depth of 10 feet below the ground surface for chemical analysis of chlorides.
- Drilled one soil boring approximately 12 feet downgradient (southeast) of the former sump location to a depth of 10 feet below the ground surface. Collected one soil sample from the soil boring at a depth of 10 feet below the ground surface for chemical analysis of chlorides.
- Drilled one soil sample through the former 342 pond area to a total depth of 15 feet below the ground surface. Collected one soil sample from the soil boring at a depth of 10 feet below the ground surface for chemical analysis of chlorides.
- Collected one soil sample from the ground surface to a depth of 0.5 foot from an area 250 feet north of Building 110 as a background soil sample for chemical analysis of chlorides.

Ravine Below the Phosphorous Stabilizing Area

- Set up a 25-foot-wide and 50-foot-long grid with 5-foot by 5-foot cells for field screening with an organic vapor analyzer (OVA).
- Drilled four soil borings at randomly selected grid point locations to depths of 10 feet below the ground surface. Collected and submitted seven soil samples from depths of 5 and 10 feet below the ground surface for chemical analysis by EPA Methods 8240 and 8270 and for California Assessment Manual (CAM) metals.

Building 228 Area

- Set up a 30-foot-wide and 40-foot-long grid with 10-foot cells for field screening with an OVA.
- Drilled four soil borings at randomly selected grid point locations to depths of 10 feet below the ground surface. Collected and submitted seven soil samples from depths of 5 and 10 feet below the ground surface for chemical analysis by EPA Methods 8240 and 8270 and for CAM metals.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 3

2.0 SOIL SAMPLING RESULTS

2.1 Old Lead Azide Building Sump and Drainage Area

On December 13, 1990, a Bermite employee identified the former location of the sump at the former old lead azide building (Figure 2). The excavation of the former sump measured 6 feet by 4 feet and was 5 feet deep (Photograph 1, Appendix A). Delta supervised the drilling of two soil borings near this location. One soil boring (B-5) was drilled adjacent to the former sump and soil samples were collected at 5.5- and 10-foot intervals for chemical analysis. A second soil boring (B-6) was drilled 15 feet southwest of soil boring B-5 along the drainage area (Photograph 2), and soil samples were collected at 5.5- and 10-foot intervals for chemical analysis. Soil boring locations are presented in Figure 2. Soil sampling procedures are presented in Appendix B.

Classification of the soil samples collected from the soil borings indicated the soils underlying this area to a depth of 10 feet were comprised of grayish-brown, fine-grained, dry, silty sand with gravel. Soil boring logs are presented in Appendix C.

All four soil samples were submitted to FGL Laboratories (FGL), a state-certified laboratory, for chemical analyses of total lead by EPA Method 7420.

The results of the chemical analysis of total lead by EPA Method 7420 indicated concentrations of lead ranged from 5.0 to 7.0 parts per million (ppm) except for a concentration of 79.0 ppm at soil boring B-6 at a depth of 5.5 feet. Table 1 presents the results of the chemical analysis for total lead. Laboratory data sheets are presented in Appendix D.

2.2 Building 110 Sump, Drainage Area, Former Pond 342 Area, and Background

On December 13, 1990, a Bermite employee identified the location of the former sump at Building 110 and the location of the former 342 pond (Figure 3). Delta supervised the drilling of three soil borings in this area. One soil boring (B-12) was drilled at the sump location (Photograph 3, Appendix A) to a total depth of 11.5 feet. A soil sample was collected at 10.5 feet below the ground surface for chemical analysis. The second soil boring (B-13) was drilled next to the sump location approximately 12 feet southeast of the sump to a total depth of 11.5 feet. A soil sample was collected at 10.5 feet below the ground surface for chemical

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038

Page 4

analysis. The third soil boring (B-14) was drilled within the former 342 pond area (Photograph 4) to a depth of 15 feet. A soil sample was collected at a depth of 15 feet below the ground surface for chemical analysis. A fourth soil sample was collected for background chloride levels at approximately 250 feet north of Building 110 by driving a brass tube into the ground surface to a depth of 6 inches. The location of the soil borings and background sample are shown in Figure 3. Soil sampling methodologies are presented in Appendix B.

Classification of the soil samples collected from the soil borings (B-12 and B-13) near Building 110 indicated the soils underlying this area to a depth of 11.5 feet were comprised of yellowish-brown, fine-grained, dry, silty sands. Classification of the soil samples collected from soil boring B-14 over the former pond area indicated the soils underlying this area to a depth of 15.5 feet were comprised of brown, fine-grained, slightly moist, clayey sands. Soil boring logs are presented in Appendix C.

All four soil samples were submitted to FGL for chemical analysis of chlorides. A deionized water leach was conducted on each soil sample which was followed by filtration and determination of chloride concentration by titration.

The results of the chemical analysis for chloride indicated concentrations ranged from 3.0 to 20.0 ppm in the soil samples collected. A summary of the chemical results for chloride is presented in Tables 2 and 3. Laboratory data sheets are presented in Appendix E.

2.3 Ravine Below the Phosphorous Stabilizing Area

On December 12, 1990, a Bermite employee identified the area in which several 55-gallon drums were discarded and subsequently removed. A grid 25 feet wide and 50 feet long with 5-foot by 5-foot cells (Photographs 5 and 6, Appendix A) was marked off over the area by a Delta geologist (Figure 3). A visual inspection of the area for contamination was conducted. No evidence of contamination on the ground surface was noted.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038

Page 5

In accordance with the work plan, each cell was screened for volatile organic compounds (VOCs) with an OVA. A manually-operated power auger with 2-inch-diameter flights was used to drill a hole 3 feet below the ground surface at each cell location. The hole was covered with plastic for a minimum of 15 minutes before inserting the tip of the OVA through the plastic to record a reading. Field screening results are summarized in Table 4. Figure 4 shows the grid with the identification of each cell. All of the cells screened registered a zero on the OVA, except Cell 17, which registered 1 ppm.

On December 13, 1990, a Delta geologist supervised the drilling of four soil borings in this area. One soil boring (B-8) was drilled at Cell 17 due to an OVA reading of 1.0. A soil sample was collected at 3 feet below the ground surface. Soil sampling procedures are presented in Appendix B.

A random numbers generation table was used to select three cells for soil sampling. Cells 5, 22, and 46 were selected and soil borings B-7, B-9, and B-10 were drilled at these locations. Soil samples were collected at 5 and 10 feet below the ground surface for chemical analysis.

All seven soil samples were submitted to FGL for chemical analysis of purgeable organic compounds by EPA Method 8240, semivolatile priority pollutants by EPA Method 8270, and total concentrations of CAM metals as specified in the California Administrative Code (CAC), Title 22, Chapter 30, Article 11.

Classification of the soil samples collected from the soil borings indicated the soils underlying this area to a depth of 11.5 feet were comprised of grayish-brown, coarse-grained, dry, silty sands. Soil boring logs are presented in Appendix C.

The results of the chemical analysis for purgeable organic compounds by EPA Method 8240 and for semivolatile priority pollutants by EPA Method 8270 indicated that all constituents analyzed were below the detection limits set in SW-846. Laboratory data sheets are presented in Appendix F.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 6

The results of the chemical analysis for the CAM metals indicated that all the constituents analyzed were below the laboratory detection limit except for the following metals: barium, copper, lead, nickel, and vanadium. Barium was detected in soil boring B-10 at a depth of 10 feet at a concentration of 68.0 ppm. The laboratory detection limit for barium is 50.0 ppm. Copper was detected in two soil borings; B-9, at a depth of 5 feet at a concentration of 12.0 ppm; and B-10, at a depth of 10 feet at a concentration of 10.0 ppm. The laboratory detection limit for copper was set at 10.0 ppm. Lead was detected in the soils from each of the soil borings at depths of 5 and 10 feet at concentrations between 4.0 and 6.0 ppm. The only exception was at B-7 at a depth of 10 feet, where lead was less than the detection limit of 4.0 ppm. Nickel was detected in the soils from all of the soil borings at depths of 5 and 10 feet except for soil boring B-7. Concentrations of nickel were between 10.0 and 18.0 ppm with a detection limit of 10.0 ppm. Vanadium was detected in the soils from all of the soil borings at depths of 5 and 10 feet except for soil boring B-7 at 10 feet. Concentrations of vanadium detected ranged from 13.0 to 22.0 ppm with a laboratory detection limit of 10.0 ppm. A summary of the chemical results for the metals analyzed is presented in Table 5. Laboratory data sheets are presented in Appendix F.

2.4 Building 228 Area

On December 12, 1990, a Bermite employee identified the asphalt area of concern near the former location of Building 228. A grid 30 feet wide and 40 feet long with 10-foot by 10-foot cells (Photographs 7 and 8, Appendix A) was marked off over the area by a Delta geologist (Figure 3). A visual inspection of the area for contamination was conducted. Evidence of contamination at the surface was not noticed. In accordance with the work plan, each cell was screened for VOCs with an OVA. To accomplish this, a manually operated auto hammer with 1/2-inch-diameter bits was used to drill a hole 1.5 feet below the ground surface at each cell location. The hole was covered with plastic for a minimum of 15 minutes before inserting the tip of the OVA through the plastic to record a reading. Field screening results are summarized in Table 6. Figure 5 shows the grid with the identification of each vapor point. All of the cells screened registered a zero on the OVA except Cell 10 which registered 6.0 ppm.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038

Page 7

Verification of the OVA reading at Cell 10 was conducted on March 12, 1991, by a Bermite employee. Four additional vapor points (10 A-D) were drilled with a manually operated power auger to depths of 3 feet below the ground surface around the initial vapor point drilled on December 31, 1990, at Cell 10. The holes were covered with plastic for a minimum of 15 minutes before inserting the tip of the OVA through the plastic to record a reading. Field screening results are summarized in Table 6. Vapor points (10 A-D) are shown in Figure 5. The OVA screening on these additional vapor points registered a zero.

On December 13, 1990, a Delta geologist supervised the drilling and sampling of four soil borings at this location. One soil boring (B-4) was drilled at Cell 10 as a result of an OVA reading of 6.0. A soil sample was collected at 3 feet below the ground surface for chemical analysis. Soil sampling procedures are presented in Appendix B.

A random numbers generation table was used to select three cells for soil sampling. Cells 2, 5, and 9 were selected and soil borings B-1, B-2, and B-3 were drilled at these locations, respectively. Soil samples were collected at 5 and 10 feet below the ground surface for chemical analysis.

All seven soil samples were submitted to FGL for chemical analysis of purgeable organic compounds by EPA Method 8240, semivolatile priority pollutants by EPA Method 8270, and total concentrations for the CAM metals.

Classification of the soil samples collected from these soil borings indicated the soils underlying this area to a depth of 10 feet were comprised of brown, fine-grained, dry, silty sands. Soil boring logs are presented in Appendix C.

The results of the chemical analysis for purgeable organic compounds by EPA Method 8240 and semivolatile priority pollutants by EPA Method 8270 indicated that all constituents analyzed were below the detection limits set in SW-846. Chemical results of the soil sample collected from soil boring B-1 at a depth of 5 feet from Cell 2 indicated the presence of bis (2-ethylhexyl) phthalate, which is a plasticizer, at a concentration of 1.3 ppm. The laboratory detection limit was 1.0 ppm. Laboratory data sheets are presented in Appendix G.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 8

The results of the chemical analysis for the CAM metals indicated that all the constituents analyzed were below the laboratory detection limits except for the following metals: barium, copper, lead, nickel, and vanadium. Barium was detected in soil boring B-2 at a depth of 10 feet at a concentration of 75.0 ppm. The laboratory detection limit for barium was 50.0 ppm. Copper was detected in the soils at soil borings B-1 and B-2 at depths of 5 and 10 feet at concentrations ranging from 12.0 to 16.0 ppm. The laboratory detection limit for copper was 10.0 ppm. Nickel was detected in the soils at all of the soil borings at depths of 5 and 10 feet at concentrations ranging from 11.0 to 20.0 ppm. There was one exception, the results of the chemical analysis of the soil sample collected from soil boring B-3 at 10 feet indicated that concentrations of nickel were below the laboratory detection limit of 10.0 ppm. Vanadium was detected in the soils at all of the soil borings at depths of 5 and 10 feet at concentrations ranging from 11.0 to 28.0 ppm. The laboratory detection limit for vanadium was 10.0 ppm.

A summary of the chemical results for the metals analyzed is presented in Table 7. Laboratory data sheets are presented in Appendix G.

2.5 Background

On November 20, 1987, four soil borings were drilled under the supervision of a Wenck & Associates geologist at the background location (Figure 6). Six soil samples were collected from depths of 0 to 0.5, 0.5 to 1.0, 1.0 to 2.0, 2.0 to 3.0, 3.0 to 4.0, and 4.0 to 5.0 feet from each soil boring for chemical analysis of metals. A summary of the chemical results for the metals analyzed is presented in Appendix H. Figure 6 shows the sampling grid and identifies the soil boring locations.

3.0 SUMMARY AND DISCUSSION

On December 12 and 13, 1990, a Delta geologist collected several soil samples for chemical analysis at the following areas: old lead azide building sump and drainage area; Building 110 sump, drainage area, pond 342, and background area; ravine below the phosphorous stabilizing area; and Building 228 area.

3.1 Old Lead Azide Building Sump and Drainage Area

Due to the inherent variability of metals concentrations in the soils, the mean concentration for lead was calculated for the soils in the background area (Table 8) for comparison to the results obtained from these specific soil samples (Table 1). In order to account for the variability of metals in soils, the standard deviation for lead was calculated for the background soil samples (Table 8). The total lead concentrations

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 9

for the soil samples collected at the former sump at depths of 5 and 10 feet and in the drainage area at a depth of 10 feet were within or slightly above one standard deviation of the mean calculated from the background area indicating lead concentrations are within background levels. The soil sample from soil boring B-6 at a depth of 5.0 feet indicated the presence of lead at a concentration of 79.0 ppm. This concentration is several times greater than background levels identified on site but is within the range of lead levels found in the soil throughout California and the United States (U.S. Geological Survey Professional Paper 957, Lead in the Environment).

3.2 Building 110 Sump, Drainage Area, Pond 342 Area, and Background Area

Concentrations of chloride in the soil samples collected from the Building 110 sump and drainage area were 3.5 and 5.0 ppm, respectively, which were similar to the concentrations of chloride detected in the background soil sample.

The results of the chemical analysis for chloride from the soil sample collected from the 342 pond area (B-11) at a depth of 15 feet below the ground surface indicated a concentration of chloride of 20.0 ppm. Chloride does not pose a threat to the environment or to human health at these concentrations.

3.3 Ravine Below the Phosphorous Stabilizing Area

Several inorganic constituents (barium, copper, lead, nickel, and vanadium) were detected in the soils at concentrations above the detection limits of the laboratory. Due to the inherent variability of soils and their metals concentrations, the mean concentration for each constituent was calculated for the soils collected at the ravine and background areas (Tables 5 and 8, respectively).

In order to account for the variability of metals in soils, the standard deviation for each constituent was calculated for the background soil samples (Table 8). The calculated means for concentrations of barium, copper, lead, and nickel in the soils from the ravine area are within one standard deviation of the means calculated from the background area soil samples, indicating the metals detected are within background levels.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA

Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 10

Vanadium was not used on the site; however, the analysis for CAM metals included vanadium. The concentrations detected were similar to the concentrations detected near Building 228, which is located 5,500 feet northwest of the ravine. It is Delta's opinion that the concentrations detected are representative of the natural background soil conditions and pose no threat to the environment or human health.

3.4 Building 228 Area

Several inorganic constituents (barium, copper, lead, nickel, and vanadium) were detected in the soils at concentrations above the detection limits of the laboratory. Due to the inherent variability of soils and their metals concentrations, the mean concentration for each constituent was calculated for the soils obtained across the 228 and background areas (Tables 7 and 8, respectively). In order to account for the variability of metals in soils, the standard deviation for each constituent was calculated for the background soil samples (Table 8). The calculated means for concentrations of barium and copper in the soils from the 228 area are within one standard deviation of the means calculated from the background area indicating these metals are within background levels.

The calculated means for concentrations of lead and nickel were slightly above one standard deviation of the means calculated from the background area; however, the comparison of the range of concentrations detected in the soils at the 228 area are within the range of concentrations detected in the soil in the background area indicating the metals detected are within background levels.

Vanadium was not used on the site; however, the analysis for CAM metals included vanadium. The concentrations detected in the soils were similar to the concentrations detected in the soils from the ravine areas which are located 5,500 feet southeast of the 228 area. It is Delta's opinion that the concentrations detected are representative of the natural background soil conditions and pose no threat to the environment or human health.

The detection of bis (2-ethylhexyl) phthalate (a plasticizer) at a concentration of 1.3 ppm, is probably due to cross-contamination in the laboratory. A plasticizer is usually used in the manufacturing of plastics to make plastic soft and flexible. EPA considers plasticizers to be a common laboratory contaminant.

SOIL SAMPLING RESULTS
FOR THE OLD LEAD AZIDE BUILDING SUMP AND DRAINAGE AREA,
BUILDING 110 SUMP, DRAINAGE AREA, AND POND 342,
RAVINE BELOW THE PHOSPHOROUS STABILIZING AREA,
AND BUILDING 228 AREA


Whittaker Corporation, Bermite Division
22116 West Soledad Canyon Road, Santa Clarita, California
Delta Project No. 40-90-038
Page 11

4.0 REMARKS/SIGNATURES

The recommendations contained in this report represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

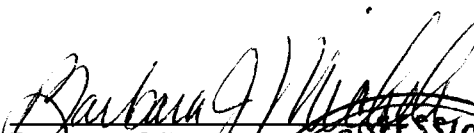
DELTA ENVIRONMENTAL CONSULTANTS, INC.


This report was prepared by:


Michael J. O'Brien
Hydrogeologist/Project Manager

Date 3-22-91

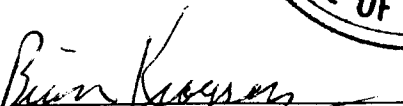
This report was reviewed by:


Barbara J. Mickelson
District Manager



Date 3-22-91

The work performed in this report was done under the supervision of a California Registered Geologist:


Brian L. Krogseng, R.G.
California Registered
Geologist #2303

Date 3-22-91

TABLE 1

Results of the Chemical Analysis for Total Lead for Soil Samples
 Collected at the Former Old Lead Azide Building Sump and Drainage Area
 Concentrations in milligrams per kilogram (mg/kg)

<u>Soil Boring</u>	<u>Description</u>	<u>Date Collected</u>	<u>Depth (ft)</u>	<u>Total Lead</u>
B-5-1	Former Sump	12/13/90	5.5	7.0
B-5-2	Former Sump	12/13/90	10.0	5.0
B-6-1	Drainage	12/13/90	5.5	79.0
B-6-2	Drainage	12/13/90	10.0	6.0

TABLE 2

Results of the Chemical Analysis for Chloride for Soil Samples Collected
 at the Former Building 110 Sump, Drainage Area, and the Former 342 Pond Area
 Concentrations in milligrams per kilogram (mg/kg)

<u>Soil Boring</u>	<u>Description</u>	<u>Date Collected</u>	<u>Depth (ft)</u>	<u>Chloride</u>
B-11-1	Former 342 Pond Area	12/13/90	15	20.0
B-12-1	Former Building 110 Sump	12/13/90	10	3.5
B-13-1	Drainage Area	12/13/90	10	5.0

TABLE 3

Results of the Chemical Analysis for Chloride for a Soil Sample
 Collected at a Background Location
 Concentrations in milligrams per kilogram (mg/kg)

<u>Sample Description</u>	<u>Date Collected</u>	<u>Depth (ft)</u>	<u>Chloride</u>
Background	12/13/90	0 to 0.5	3.0

TABLE 4

Field Screening Results of the Area Above the
Phosphorous Stabilizing Area With an Organic Vapor Analyzer
Concentrations in parts per million (ppm)

<u>Cell Number</u>	<u>Reading</u>	<u>Cell Number</u>	<u>Reading</u>	<u>Cell Number</u>	<u>Reading</u>
1	0	21	0	41	0
2	0	22	0	42	0
3	0	23	0	43	0
4	0	24	0	44	0
5	0	25	0	45	0
6	0	26	0	46	0
7	0	27	0	47	0
8	0	28	0	48	0
9	0	29	0	49	0
10	0	30	0	50	0
11	0	31	0		
12	0	32	0		
13	0	33	0		
14	0	34	0		
15	0	35	0		
16	0	36	0		
17	1	37	0		
18	0	38	0		
19	0	39	0		
20	0	40	0		

TABLE 5

A Summary of the Results of the Chemical Analyses for
California Assessment Manual Metals for Soil Samples Collected on December 13, 1990,
From an Area in the Ravine Below the Phosphorous Stabilizing Area
Concentrations in milligrams per kilogram (mg/kg)

Constituent Analyzed	Soil Sample Locations							Mean ^b	Range ^c
	B-7-1 #5-5 ^a	B-7-2 #5-10	B-8-1 #17-3	B-9-1 #22-5	B-9-2 #22-10	B-10-1 #46-5	B-10-2 #46-10		
Antimony	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	10.0	10.0
Arsenic	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	3.0
Barium	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	68.0	52.6	50-68
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Chromium (total)	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	50.0	50.0
Cobalt	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	50.0	50.0
Copper	<10.0	<10.0	<10.0	12.0	<10.0	<10.0	10.0	10.3	10-12
Lead	4.0	<4.0	5.0	5.0	5.0	5.0	6.0	4.9	4-6
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Molybdenum	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	100.0	100.0
Nickel	<10.0	<10.0	10.0	10.0	10.0	13.0	18.0	11.35	10-18
Selenium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Silver	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	3.0
Thallium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	5.0
Vanadium	13.0	<10.0	19.0	15.0	15.0	19.0	22.0	16.1	10-22
Zinc	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	100.0	100.0

^aGrid number and sample depth in feet.

^bThe mean for constituents with concentrations less than detection were calculated assuming the concentration was at the detection limit.

^cThe range for constituents less than detection was given as the detection limit.

TABLE 6

Field Screening Results for the Area Near Building 228 With the Organic Vapor Analyzer
Concentrations in parts per million

<u>Cell Number</u>	<u>Reading</u>
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	6
A	0
B	0
C	0
D	0
11	0
12	0

TABLE 7

A Summary of the Results of the Chemical Analyses for California Assessment Metals
for Soil Samples Collected on December 13, 1990, From the Area Near Building 228
Concentrations in milligrams per kilogram (mg/kg)

Constituent <u>Analyzed</u>	<u>Soil Sample Locations</u>							<u>Mean^b</u>	<u>Range^c</u>
	<u>B-1-1</u> <u>#2-5^a</u>	<u>B-1-2</u> <u>#2-10</u>	<u>B-2-1</u> <u>#5-5</u>	<u>B-2-2</u> <u>#5-10</u>	<u>B-3-1</u> <u>#9-5</u>	<u>B-3-2</u> <u>#9-10</u>	<u>B-4-1</u> <u>#10-3</u>		
Antimony	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	10.0	10.0
Arsenic	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	3.0
Barium	<50.0	<50.0	<50.0	75.0	<50.0	<50.0	<50.0	53.6	50-75
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Chromium (total)	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	50.0	50.0
Cobalt	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	50.0	50.0
Copper	16.0	12.0	16.0	14.0	<10.0	<10.0	<10.0	12.6	10-16
Lead	8.0	6.0	6.0	8.0	5.0	4.0	5.0	6.0	4-8
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Molybdenum	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	100.0	100.0
Nickel	18.0	14.0	14.0	20.0	12.0	<10.0	11.0	14.1	10-20
Selenium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5
Silver	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	3.0
Thallium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	5.0	5.0
Vanadium	19.0	19.0	17.0	28.0	14.0	11.0	13.0	17.30	11-28
Zinc	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	<100.0	100.0	100

^aGrid number and sample depth in feet.

^bThe mean for constituents with concentrations less than detection were calculated assuming the concentration was at the detection limit.

^cThe range for constituents less than detection was given as the detection limit.

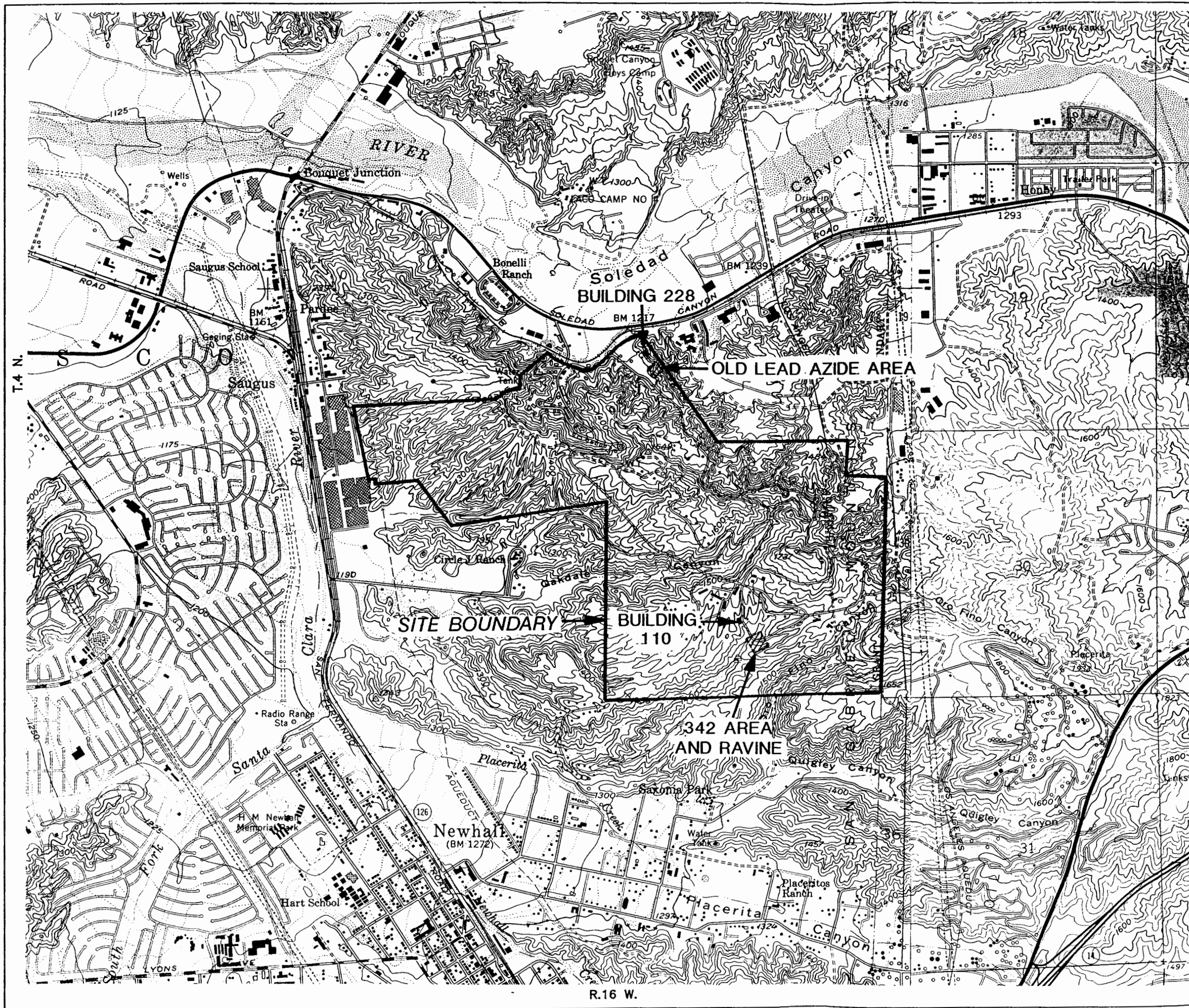
TABLE 8

Mean, Standard Deviation and Range for Background Area Metal Concentrations

<u>Constituent</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Range</u>
Antimony	10.0	0	10.0
Arsenic	4.6	0.9	3.0-6.0
Barium	52.1	5.9	50-76
Beryllium	0.5	0	0.5
Cadmium	0.5	0	0.5
Chromium (total)	50.0	0	50.0
Cobalt	--- ^a	---	---
Copper	10.7	2.7	10-23
Lead	3.7	1.8	3-12
Mercury	0.1	0	0.1
Molybdenum	---	---	---
Nickel	10.4	2.0	10-20
Selenium	.5	0	0.5
Silver	3.0	0	3.0
Thallium	5.0	0	5.0
Vanadium	---	---	---
Zinc	---	---	---

^aConstituent not analyzed.

FIGURES



GENERAL NOTES:
 BASE MAPS FROM U.S.G.S.
 NEWHALL AND MINT CANYON, CA.
 7.5 MINUTE TOPOGRAPHIC
 PHOTOREVISED 1988



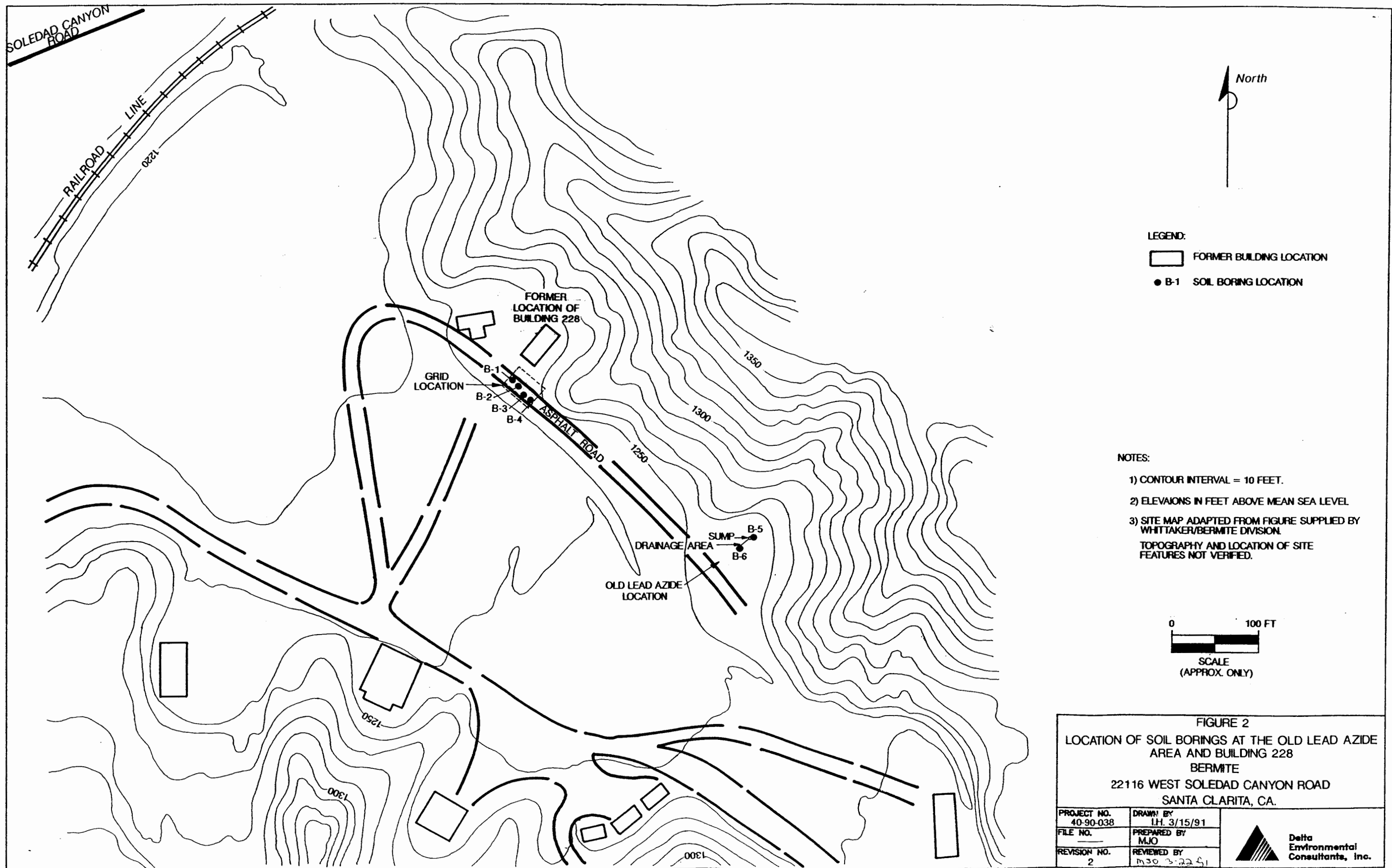
QUADRANGLE LOCATION

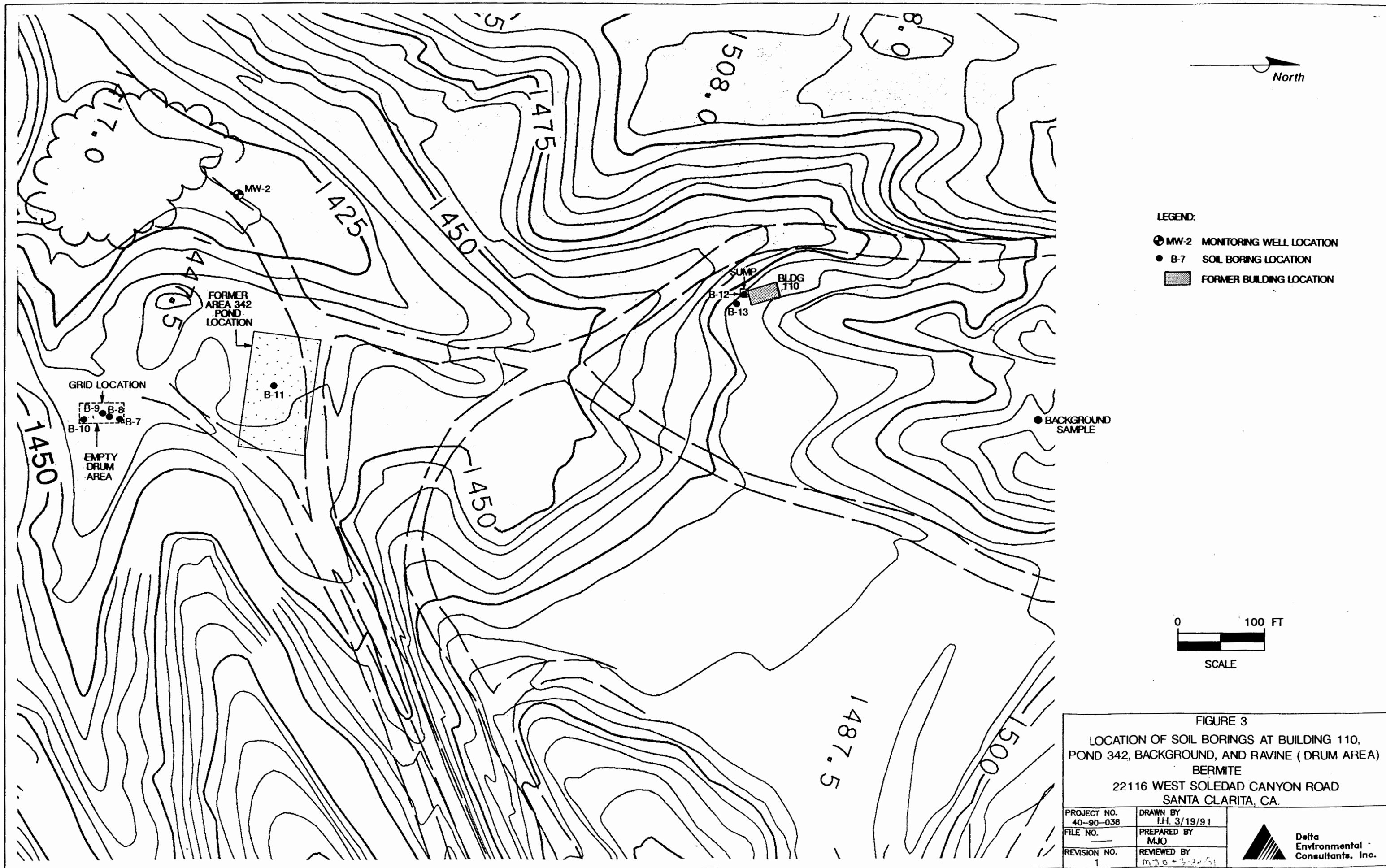
0 2000 FT
 SCALE 1 : 24,000

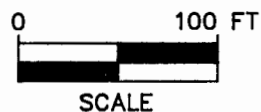
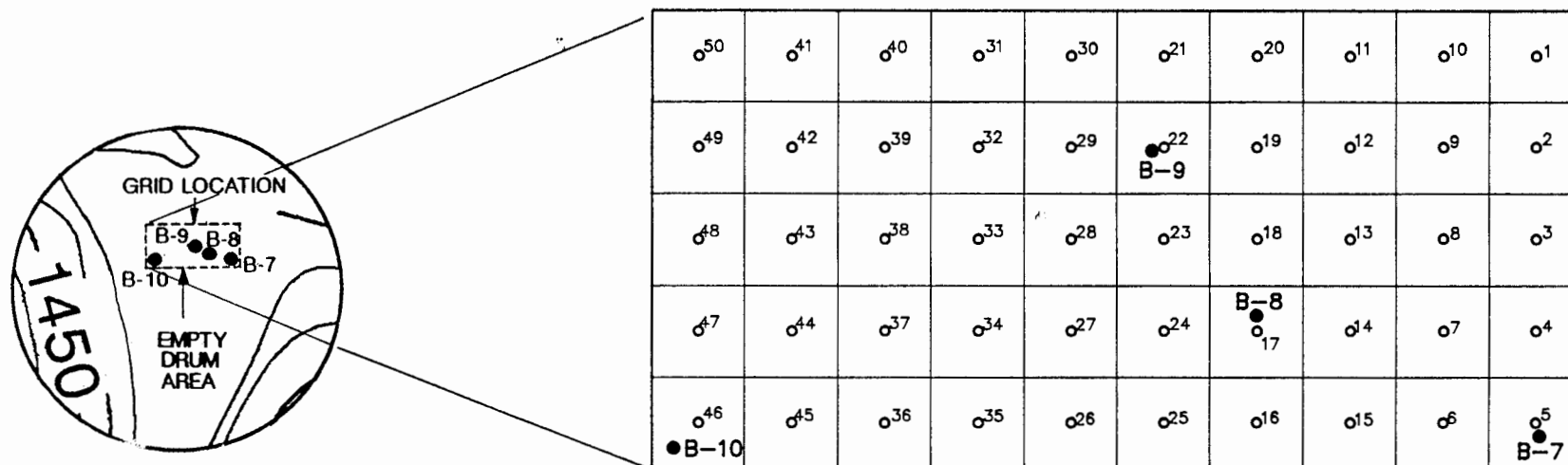
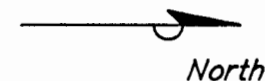
FIGURE 1
 SITE LOCATION MAP
 BERMITE
 22116 WEST SOLEDAD CANYON ROAD
 SANTA CLARITA, CA.

PROJECT NO. 40-80-038	DRAWN BY I.H. 3/18/91
FILE NO.	PREPARED BY MJO
REVISION NO. 1	REVIEWED BY MJO 3-22-91









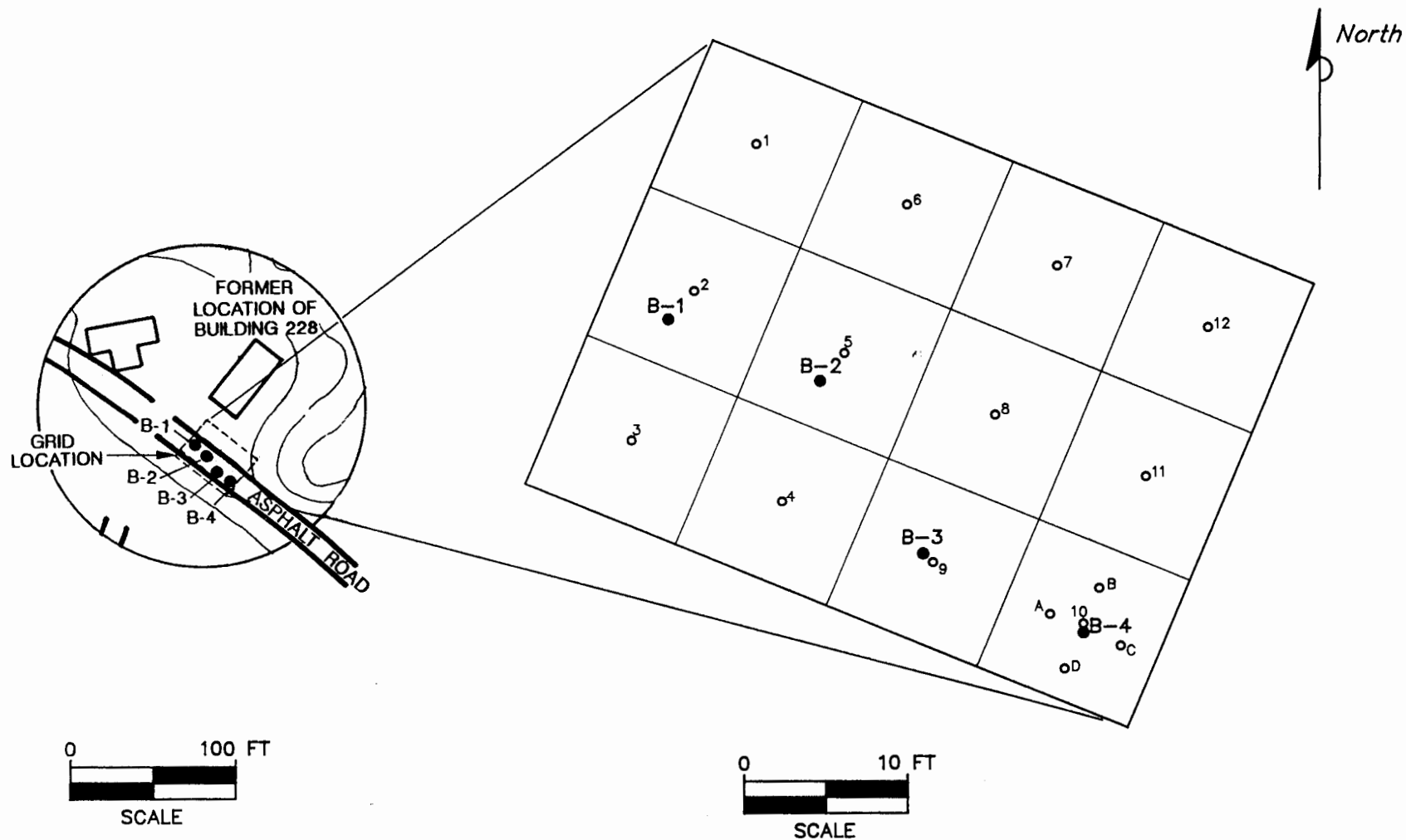
LEGEND:

- B-9 SOIL BORING LOCATION
- o 3 VAPOR PROBE LOCATION

FIGURE 4
CELL LOCATIONS AT THE RAVINE BELOW
THE PHOSPHOROUS STABILIZING AREA
BERMITE
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA, CA.

PROJECT NO. 40-90-038	DRAWN BY I.H. 3/19/91
FILE NO. 90-038-7	PREPARED BY HEH
REVISION NO. 2	REVIEWED BY m30 3-22-91





LEGEND:

- B-1 SOIL BORING LOCATION
- 3 VAPOR PROBE LOCATION

FIGURE 5
CELL LOCATIONS AT THE
FORMER BUILDING 228 AREA
BERMITE
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA, CA.

PROJECT NO. 40-90-038	DRAWN BY I.H. 3/19/91
FILE NO. 90-038-7	PREPARED BY HEH
REVISION NO. 2	REVIEWED BY MSO 3-22-91



Delta
Environmental
Consultants, Inc.

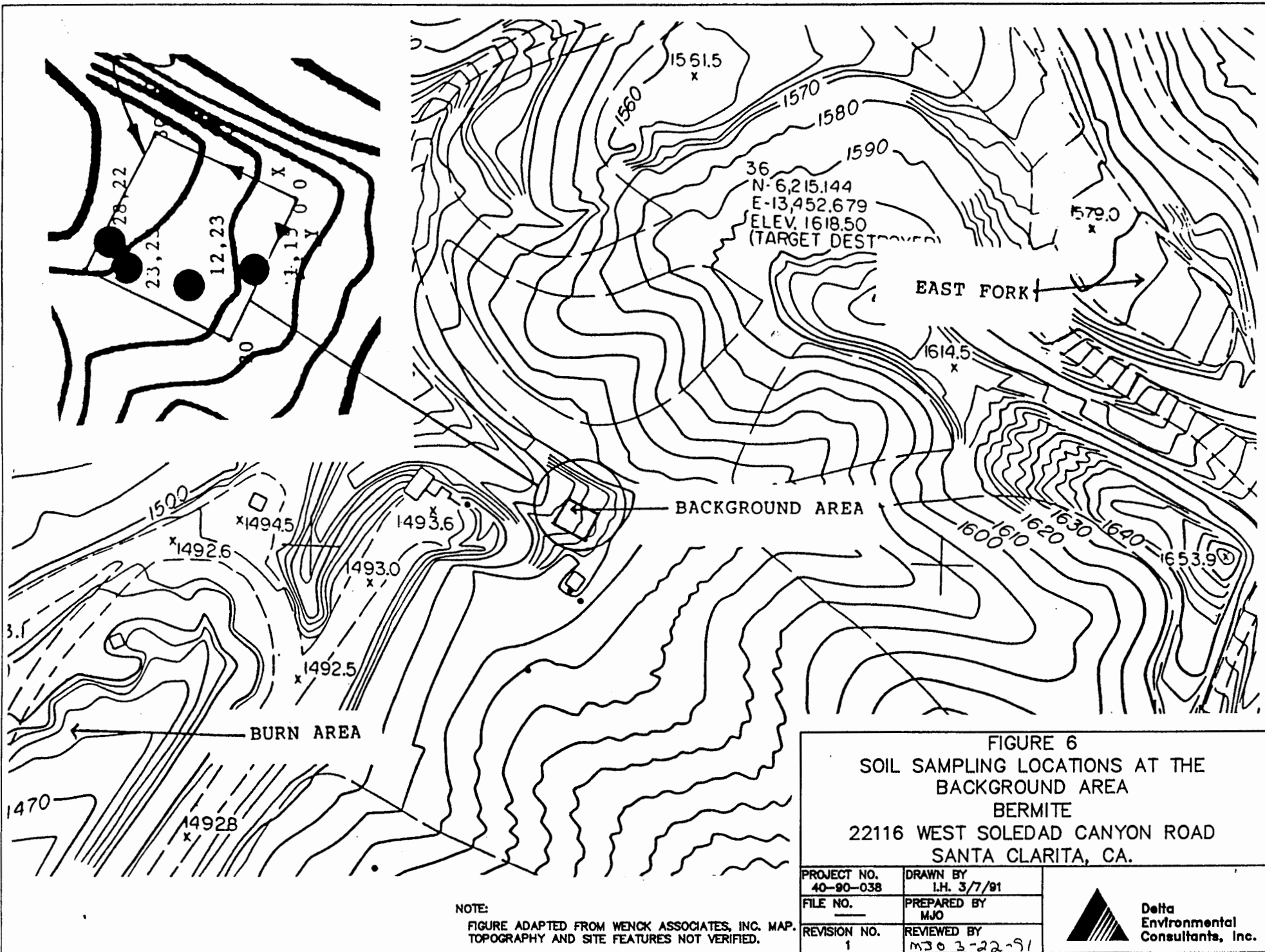


FIGURE 6
SOIL SAMPLING LOCATIONS AT THE
BACKGROUND AREA
BERMITE
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA, CA.

PROJECT NO. 40-90-038	DRAWN BY L.H. 3/7/91
FILE NO.	PREPARED BY MJO
REVISION NO. 1	REVIEWED BY M30 3-22-91

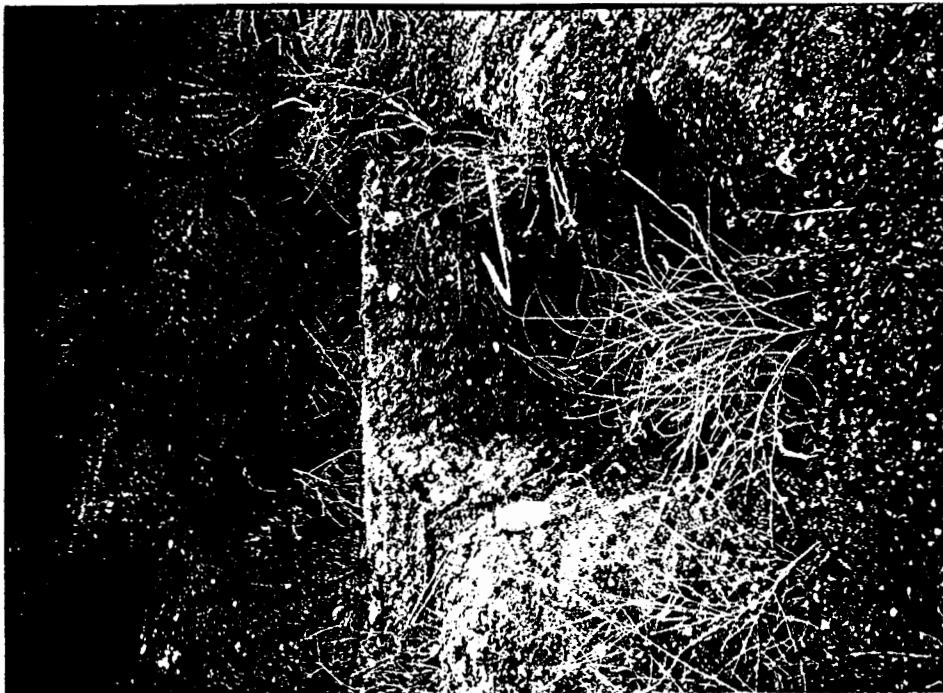


Delta
Environmental
Consultants, Inc.

APPENDICES

APPENDIX A

Site Reconnaissance Photographs



1-
Former sump location at the
former old lead azide building
area.



2-
View toward the southwest
showing the locations of soil
borings SB-5 and SB-6.



3-
View toward the southeast
showing the former Building 110
area and soil boring locations.



4-
View toward the northeast showing the area of the former surface impoundment at the 342 area and soil boring location.



5-
View toward the west showing the location of the grid over the area where the empty 55-gallon drums were found.



6-
View toward the west showing the location of the grid over the area where the empty 55-gallon drums were found.



7-
View toward the northwest
showing the location of the grid
over the paint spill area.



8-
View toward the southeast
showing the location of the grid
and soil borings.

APPENDIX B

Soil Sampling Procedures

1.0 METHODS

1.1 Soil Sampling and Contamination Reduction

Soil borings and soil sampling were performed under the direction of a Delta engineer or geologist. The soil borings were advanced using a truck-mounted hollow-stem auger drill rig.

To reduce the chances of cross-contamination between boreholes, all downhole drilling equipment was steam-cleaned between each boring. To reduce cross-contamination between samples, the split-barrel sampler was washed in a soap solution and double-rinsed between each sampling event.

Soil sampling was done in accordance with ASTM 1586-84. Using this procedure, a 2-inch outside-diameter split-barrel sampler or a 2-inch inside-diameter California-type sampler was driven into the soil by a 140-pound weight falling 30 inches. After an initial set of 6 inches, the number of blows required to drive the sampler an additional 12 inches is known as penetration resistance, or the "N" value. The N value is used as an empirical measure of the relative density of cohesionless soils and the consistency of cohesive soils.

Upon recovery, a portion of the soil sample was placed into a glass jar and sealed for later screening with the organic vapor analyzer (OVA). Another portion of the soil sample was used for classification and description. That part of the soil sample collected in brass tubes within the California-type sampler was stored at approximately 4°C for transport to the laboratory.

1.2 Soil Classification

As the samples were obtained in the field, they were classified by the crew chief/geologist in accordance with the Unified Soil Classification System. Representative portions of the samples were then retained for further examination and for verification of the field classification. Logs of the borings indicating the depth and identification of the various strata, the N value, and pertinent information regarding the method of maintaining and advancing the borehole were made.

1.3 Soil Sample Screening/hNu PID Method

After soil sample jars were brought to ambient temperature, the headspace vapors of the soil sample jars were screened with a OVA calibrated to methane. The sample jar lid was opened and the detector probe immediately placed within the headspace of the jar. The highest observed reading was recorded.

APPENDIX C

Soil Boring Logs

PROJECT NAME / LOCATION Bermite Building 228, Grid #2 Paint Storage Area 22116 West Soledad Canyon Road Santa Clarita, CA		PROJECT NUMBER: 40-90-038	BORING NUMBER: B-1	SHEET 1 OF 1
		CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
		DRILLER: Cezar Diez		DRILLING RIG: B-61
		START: 7:20/12-13-90		COMPLETED: 7:50/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:		LOGGED BY: Hal Hansen

S A Y M P L E	T S N A U M P L E	B C L O U M P L E	S I A N M T P L E	S R A E M C P O L V E	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION INSTRUMENT: OVM UNITS: ppm	GENERAL OBSERVATION NOTES
					1	ASPHALT		
					2			
					3			
					4			
CA	B-1 1	7/ 11/ 20	5.0- 6.5	6"	5	SILTY SAND; brown, fine sand dry, some gravel (SM)	0	No odor
					6			
					7			
					8			
					9			
CA	B-1 2	8/ 14/ 19	10.0- 11.5	18"	10		0	No odor
					11			
					12	Total Depth 11.5 feet		
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			
					21			
					22			
					23			

WATER LEVEL DATA				GEOLOGIST	
DATE					
TIME					
GWL				SIGNATURE	
				Hal Hansen	
CASING DEPTH				TYPED NAME	

PROJECT NAME / LOCATION Bernite Building 228, Grid #5 Paint Storage Area 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-2	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 7:55/12-13-90		COMPLETED: 8:20/12-13-90

LAND OWNER: Whittaker Corporation	SURFACE ELEVATION:	LOGGED BY: Hal Hansen
------------------------------------------	---------------------------	---------------------------------

S A Y M P L E	T A U P L E R	S N A U M P L E R	B C L O U M N T S	S I A N M T P L E(ft)	S R A E M C P O L V E(in)	D E P T H S C A L E 1"= 4'	D E S C R I P T I O N S O F M A T E R I A L S A N D C O N D I T I O N S	CONTAMINANT OBSERVATION	G E N E R A L O B S E R V A T I O N N O T E S
								INSTRUMENT: OVM UNITS: ppm	
CA	B-2	1	27/ 50 for 3"	5.0- 6.5	6"	1	ASPHALT		No odor
						2			
						3			
						4			
						5	SILTY SAND; brown, fine sand dry, some gravel (SM)	0	
						6			
						7			
						8			
						9			
						10		0	
CA	B-2	2	85 for 6"	10.0- 11.5	10"	11			No odor
						12	Total Depth 11.5 feet		
						13			
						14			
						15			
						16			
						17			
						18			
						19			
						20			
						21			
						22			
						23			

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Building 228, Grid #9 Paint Storage Area 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-3	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 8:30/12-13-90		COMPLETED: 8:50/12-13-90

LAND OWNER: Whittaker Corporation	SURFACE ELEVATION:	LOGGED BY: Hal Hansen
------------------------------------------	---------------------------	---------------------------------

S T A Y M P L E	S N A U M P L E	B C L O U N T S	S I A N T P L E(ft)	S R A E M C P O L V E(in)	D E P T H S C A L E 1"= 4'	D E S C R I P T I O N S O F M A T E R I A L S A N D C O N D I T I O N S	CONTAMINANT OBSERVATION	G E N E R A L O B S E R V A T I O N N O T E S
							INSTRUMENT: OVM UNITS: ppm	
CA	B-3 1	8/ 13/ 16	5.0- 6.5	18"	1	ASPHALT		No odor
					2			
					3			
					4			
					5	SILTY SAND; brown, fine sand	0	
					6	dry some gravel (SM)		
					7			
					8			
					9			
CA	B-3 2	65 for 6"	10.0- 11.5	6"	10	Color change to light gray	0	No odor
					11	(SM)		
					12	Total Depth 11.5 feet		
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			
					21			
					22			
					23			

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Building 228, Grid #10 Paint Storage Area 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-4	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 9:00/12-13-90		COMPLETED: 9:10/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A Y M P L E	T A U M P L E	N A U M B E R	B C L O U S E	S I A N M T P L E	R A E M C P O L V E	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION INSTRUMENT: OVM UNITS: ppm	GENERAL OBSERVATION NOTES
CA	B-4	1	8/ 14/ 19	3.0- 4.5	14"	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	ASPHALT SILTY SAND; brown, fine sand dry (SM) Total Depth 4.5 feet	0	No odor

WATER LEVEL DATA				GEOLOGIST
DATE				
TIME				
GWL				SIGNATURE
CASING DEPTH				Hal Hansen
				TYPED NAME

PROJECT NAME / LOCATION Bermite Old Lead Azide Building Sump 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-5	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 9:30/12-13-90		COMPLETED: 9:55/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A Y P E L E	T A M P L E	S N A U M P L E R	B C L O U N T S	S I A N M T P L E (ft)	S R A E M C P O L V E (in)	DEPTH SCALE 1"= 4'	DESCRIPTORS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
								INSTRUMENT: OVM UNITS: ppm	
CA		B-5 1	8/ 11/ 17	5.0- 6.5	18"	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	SILTY SAND; grayish-brown, fine sand, dry, some gravel (SM)	0	No odor
CA		B-5 2	9/ 15/ 19	9.0- 10.5	18"			0	No odor
Total Depth 10.5 feet									

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Old Lead Azide Buidling Drain Area 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-6	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 10:10/12-13-90		COMPLETED: 10:40/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

STAY MPE LE	SN AUM PPE LER	BC LOU NTS	SI AN MT PL E(ft)	SR AE MC POL V E(in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION INSTRUMENT: OVM UNITS: ppm	GENERAL OBSERVATION NOTES
CA	B-6 1	10/ 11/ 22	5.0- 6.5	18"	1 2 3 4 5 6 7 8	SILTY SAND; grayish-brown, fine sand, dry, some gravel (SM)	0	No odor
CA	B-6 2	12/ 18/ 27	9.0- 10.5	18"	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23			
						Total Depth 10.5 feet		

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Phosphorus Stabilizing Area Grid #5 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-7	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 11:35/12-13-90		COMPLETED: 11:50/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A Y M P L E	T A U M P L E	S N M M P L E	B C O U N T S	S I A N M T P L E(ft)	S R A E M C P O L V E(in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
								INSTRUMENT: OVM UNITS: ppm	
CA	B-7 1	70 for 6"	5.0- 6.5	7"	1	SILTY SAND; grayish-brown, coarse sand, dry, some gravel (SM)	0	No odor	
					2				
					3				
					4				
					5				
					6				
					7				
					8				
					9				
CA	B-7 2	10/ 50 for 5"	10.0- 11.5	8"	10	Total Depth 11.5 feet	0	No odor	
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				
					23				

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Phosphorus Stabilizing Area Grid #17 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-8	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 12:05/12-13-90		COMPLETED: 12:10/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A Y M P L E	T A U M P L E	S N A U M P L E	B C L O U M P L E	S I A N M T P L E	S R A E M C P O L V E	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
								INSTRUMENT: OVM UNITS: ppm	
CA	B-8	12/14/90	3.0-4.5	18"		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	SILTY SAND; grayish-brown, coarse sand, dry, some gravel (SM) Total Depth 4.5 feet	0	No odor

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Phosphorus Stabilizing Area Grid #22 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-9	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 12:20/12-13-90		COMPLETED: 12:50/12-13-90
LAND OWNER: Whittaker Corporation	SURFACE ELEVATION:	LOGGED BY: Hal Hansen	

STAY MPE LE	SNA MPE LER	BLOW NTS	SIN MT PL E(ft)	SRE MCP OLV E(in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
							INSTRUMENT: OVM UNITS: ppm	
CA	B-9 1	12/ 14/ 19	5.0- 6.5	18"	1 2 3 4 5 6 7 8 9	SILTY SAND; grayish-brown, coarse sand, dry, some gravel (SM)	0	No odor
CA	B-9 2	12/ 16/ 19	10.0- 11.5	18"	10 11 12 13 14 15 16 17 18 19 20 21 22 23		0	No odor
						Total Depth 11.5 feet		

WATER LEVEL DATA				GEOLOGIST
DATE				SIGNATURE Hal Hansen
TIME				
GWL				
CASING DEPTH				TYPED NAME

PROJECT NAME / LOCATION Bermite Phosphorus Stabilizing Area Grid #46 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-10	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 1:00/12-13-90		COMPLETED: 1:25/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A M P L E	T Y P E	S A M P L E R	N U M B E R	B C L O U N T S	S I A N M T P L E(ft)	S R A E M C P O L V E(in)	DEPTH SCALE 1"= 4'	DESCRIPTORS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
									INSTRUMENT: OVM UNITS: ppm	
CA		B-10 1	13/ 18/ 24	5.0- 6.5	18"	1				No odor
						2				
						3				
						4				
						5	SILTY SAND; light brown, coarse sand, dry some gravel (SM)	0		
						6				
						7				
						8				
						9				
CA		B-10 2	17/ 10/ 12	10.0- 11.5	18"	10		0	No odor	
						11				
						12	Total Depth 11.5 feet			
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				
						21				
						22				
						23				

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Pond Area 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-11	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 2:50/12-13-90		COMPLETED: 3:20/12-13-90

LAND OWNER: Whittaker Corporation	SURFACE ELEVATION:	LOGGED BY: Hal Hansen
------------------------------------------	---------------------------	---------------------------------

S T A Y P L E	S N A U M P P L E R	B C L O U M B W N T S	S I A N M T P L E (ft)	S R A E M C P O L V E (in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
							INSTRUMENT: OVM UNITS: ppm	
CA	B-11 1	30/ 40/ 45	14.0- 15.5	18"	1	CLAYEY SAND; brown, fine sand, slightly moist some cobbles (SC)		
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			
					13			
					14			
					15			
					16	Total Depth 15.5 feet	0	No odor
					17			
					18			
					19			
					20			
					21			
					22			
					23			

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Building 110 Through Former Sump 22116 West Soledad Canyon Road Santa Clarita, CA		PROJECT NUMBER: 40-90-038	BORING NUMBER: B-12	SHEET 1 OF 1
		CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
		DRILLER: Cezar Diez		DRILLING RIG: B-61
		START: 3:30/12-13-90		COMPLETED: 3:50/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:		LOGGED BY: Hal Hansen

SAMPLE	NUMBER	BOUNTS	SAMPL E(ft)	SRE MC PLV E(in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES	
							INSTRUMENT:		
							UNITS:		
CA	B-12 1	15/ 20/ 26	10.0- 11.5	18"	1	SILTY SAND; yellowish-brown, fine sand, dry (SM)	No reading taken		
					2				
					3				
					4				
					5				
					6				
					7				
					8				
					9				
					10				
					11				
					12	Total Depth 11.5 feet			
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				
					23				

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

PROJECT NAME / LOCATION Bermite Building 110 Next to Sump 22116 West Soledad Canyon Road Santa Clarita, CA	PROJECT NUMBER: 40-90-038	BORING NUMBER: B-13	SHEET 1 OF 1
	CONTRACTOR: Beylik		DRILLING METHOD: H.S.A.
	DRILLER: Cezar Diez		DRILLING RIG: B-61
	START: 3:55/12-13-90		COMPLETED: 4:10/12-13-90
LAND OWNER: Whittaker Corporation		SURFACE ELEVATION:	LOGGED BY: Hal Hansen

S A Y P L E	S A U M P L E	B C O U N T S	S I A N T P L E(ft)	S R A E M C P O L V E(in)	DEPTH SCALE 1"= 4'	DESCRIPTIONS OF MATERIALS AND CONDITIONS	CONTAMINANT OBSERVATION	GENERAL OBSERVATION NOTES
							INSTRUMENT:	
							UNITS:	
CA	B-13 1	17/ 21/ 27	10.0- 11.5	18"	1	SILTY SAND; yellowish-brown, fine sand, dry (SM)	No reading taken	
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12	Total Depth 11.5 feet		
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			
					21			
					22			
					23			

WATER LEVEL DATA				GEOLOGIST	
DATE				SIGNATURE Hal Hansen TYPED NAME	
TIME					
GWL					
CASING DEPTH					

APPENDIX D

**Laboratory Data Sheet for the Soil Samples Collected
at the Old Lead Azide Building Sump and Drainage Area**

CHAIN OF CUSTODY

Page 2 of 3

Delta
Environmental
Consultants, Inc.

Delta Environmental
Consultants, Inc.
3330 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085 • FAX 916/638-8385

LABORATORY SAMPLES SENT TO: FGLSanta PaulaADDRESS: Santa Paula

PROJ. NO. _____ PROJECT NAME: Bermie Santa Clarita
PROJECT LOCATION: 22116 West Soledad Canyon Road
PROJECT MANAGER: Michael A. Brian

SAMPLERS (Signature)

Neal Hanson

NUMBER OF CONTAINERS

Analysis Requested &
Container Descriptiontotal lead
7472082608270CAMagitude

REMARKS

LABORATORY SAMPLE ID	SAMPLE ID	DATE	TIME	SAMPLE TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	total lead 74720	8260	8270	CAMagitude	REMARKS
	B-5-1	12-13-90	935	soil	next to excavated sump 5.5'	1	X				on ice
	B-5-2		950		next to excavated sump 10'	1	X				
	B-6-1		1015		drain area 5.5'	1	X				
	B-6-2		1030		drain area 10'	1	X				
	B-7-1		1140		Barrel area Grid #5 5' phosphorus			X	X	X	
	B-7-2		1145		Barrel area Grid #5 10' phosphorus			X	X	X	
	B-8-1		1210		Barrel area Grid #8 3 feet phosphorus			X	X	X	
	B-9-1		1230		Barrel area Grid #22 5' phosphorus			X	X	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
<u>[Signature]</u>			<u>[Signature]</u>	<u>[Signature]</u>			

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Turnaround Time:
<u>[Signature]</u>			<u>[Signature]</u>			<u>regular</u>

Sealed for shipment by: (signature)	Date/Time	Shipment method:
<u>Neal Hanson</u>	<u>12-13-90 530</u>	<u>courier</u>

Sampler Comments: <u>on ice</u>	Laboratory Comments:
	Condition of Samples:

White: Return with analytical results to Delta

Yellow: Laboratory Copy

Pink: Delta's Copy

FGL FGL ENVIRONMENTAL**ANALYTICAL CHEMISTS**

January 4, 1991

Lab No.: 34161

Permite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

Presented below are the results of the analyses performed on your samples received on December 14, 1990. The samples have been described, as received, along with data.

DATA

	Chloride ppm
1 in Area 15 Feet	20
Through Sump 10'	3.5
Through Drain 10'	5.0
Chloride Background	3.0

Calculated as ppm chloride in dry soil.

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL

Ricardo Sandoval

Ricardo Sandoval
Agricultural Laboratory Manager

RS:mih

APPENDIX E

**Laboratory Data Sheet for the Soil Samples Collected
at the Building 110 Sump, Drainage Area, Former Pond 342 Area, and Background Area**



Delta
Environmental
Consultants, Inc.

Delta Environmental
Consultants, Inc.
3330 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085 • FAX 916/638-8385

LABORATORY SAMPLES SENT TO: FGI

Santa Paula

ADDRESS: Santa Paula

PROJ. NO. _____ PROJECT NAME: Bermuda Santa Clara
PROJECT LOCATION: 22116 West Salcedo Canyon Road
PROJECT MANAGER: Michael O'Brien

SAMPLERS (Signature) _____

LABORATORY SAMPLE ID	SAMPLE ID	DATE	TIME	SAMPLE TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	8260	8270	CANMOL	Chloride *		REMARKS
	B-9-2	12-13-90	1255	soil	Barrel area Grid #22 10' phosphorus	1	X	X	X			max 1cl
	B-10-7		1308		Barrel area Grid #46 5' phosphorus	1	X	X	X			
	B-10-2		1425		Barrel area Grid #46 10' phosphorus	1	X	X	X			
	B-11-1		1530		Padd area 15 feet	1				+		
	B-12-1		1550		in through drain 10'	1				+		
	B-13-1		1610		through drain 10'	1				+		
	Chloride backwash		1615		backwash 200 yd NW	1				+		

Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) [Signature] Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____

Relinquished by: (Signature) _____ Date _____ Time _____ Received for Laboratory by: (Signature) _____ Date _____ Time _____ Turnaround Time: 24 hours

Sealed for shipment by: (signature) Hal Hamilton Date/Time _____ Shipment method: _____

Sampler Comments: * a deionized water leach will be performed Laboratory Comments: _____

on each sample followed by filtration and Condition of Samples: _____

determination of chloride concentration concentrated

by filtration. White: Return with analytical results to Delta Yellow: Laboratory Copy Pink: Delta's Copy



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Gentlemen:

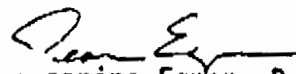
Presented below are the results of the analyses performed on your samples received on December 14, 1990. The samples have been described, as received, along with data.

DATA

	7420
	Lead
	<u>ppm</u>
Excavated Sump 5.5'	7
Next to Excavated Sump 10'	5
Drain Area 5.5'	79
Drain Area 10'	6
HLR	1.0

If you have any questions, please call or write.

Very truly yours,
FGL ENVIRONMENTAL


Jeanine Egner, B.S.
Environmental Chemist

E:mlh

APPENDIX F

**Laboratory Data Sheets for the Soil Samples Collected
From the Ravine Below the Phosphorous Stabilizing Area**



Delta
Environmental
Consultants, Inc.

Delta Environmental
Consultants, Inc.
3330 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085 • FAX 916/638-8385

LABORATORY SAMPLES SENT TO: EGSanta PaulaADDRESS: Santa Paula

PROJ. NO. _____ PROJECT NAME: Bermuda Santa Clara
PROJECT LOCATION: 22116 West Salcedo Canyon Road
PROJECT MANAGER: Michael O'Brien

SAMPLERS (Signature)

LABORATORY SAMPLE ID	SAMPLE ID	DATE	TIME	SAMPLE TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	Analysis Requested & Container Description					REMARKS
							8260	8270	CANONICAL	Chloride *		
	B-9-2	12-13-90	1255	soil	Barrel area Grid #22 10' depth	1	X	X	X			max ice
	B-10-7		1305		Barrel area Grid #6 5' depth	1	X	X	X			
	B-10-2		1825		Barrel area Grid #46 10' depth	1	X	X	X			
	B-11-1		1530		Road area 15 feet	1				X		
	B-12-1		1550		in through drain 10'	1				X		
	B-13-1		1610		through drain 10'	1				X		
	Chloride background		1615		background 200 yds DW	1				X		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
			<u>M. O'Brien</u>				
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Turnaround Time:	
						<u>24 hours</u>	

Sealed for shipment by: (signature) <u>Hal Hansen</u>	Date/Time	Shipment method:
Sampler Comments: * A deionized water leak will be performed on each sample followed by filtration and determination of chloride concentration concentration by titration.	Laboratory Comments:	Condition of Samples:

by titration.

White: Return with analytical results to Delta

Yellow: Laboratory Copy

Pink: Delta's Copy



Delta
Environmental
Consultants, Inc.

Delta Environmental
Consultants, Inc.
3330 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085 • FAX 916/638-8385

LABORATORY SAMPLES SENT TO: FGL

Santa Paula

ADDRESS: Santa Paula

PROJ. NO. _____ PROJECT NAME: Bermie Santa Clarita
PROJECT LOCATION: 22116 West Soledad Canyon Road
PROJECT MANAGER: Michael A. Brian

Analysis Requested &
Container Description

NUMBER OF CONTAINERS

total lead
7420 mg

8260

8270

CAMetals

REMARKS

SAMPLERS (Signature)

Neal Hansen

LABORATORY SAMPLE ID	SAMPLE ID	DATE	TIME	SAMPLE TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	total lead 7420 mg	8260	8270	CAMetals				
	B-5-1	12-13-91	935	soil	next to excavated area (5.5')	1	X							on ice
	B-5-2		950		next to excavated area (10')	1	X							
	B-6-1		1015		drain area (5.5')	1	X							
	B-6-2		1030		drain area (10')	1	X							
	B-7-1		1140		Barrel area ^{Grid #5} phosphorus			X	X	X				
	B-7-2		1145		Barrel area ^{Grid #5} phosphorus			X	X	X				
	B-8-1		1210		Barrel area ^{Grid #7} phosphorus 3 feet			X	X	X				
	B-9-1		1230		Barrel area ^{Grid #22} phosphorus			X	X	X				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
<u>[Signature]</u>			<u>[Signature]</u>	<u>[Signature]</u>			

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Turnaround Time:
<u>[Signature]</u>			<u>[Signature]</u>			<u>regular</u>

Sealed for shipment by: (signature)	Date/Time	Shipment method:
<u>Neal Hansen</u>	<u>12-13-91 530</u>	<u>courier</u>

Sampler Comments:	Laboratory Comments:
<u>on ice</u>	

Condition of Samples:



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-12

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 5'
Sampled By: Hal Hansen
Date Sampled: December 13, 1990
Date Received: December 14, 1990

Date Extracted: December 17, 1990
Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTLc mg/kg	Limit mg/kg			TTLc mg/kg	Limit mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Bismuth	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	13	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	4	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	ND	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Jeanine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Laboratory Director

JF'DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-12

Barmitte Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
SE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
1-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
1-benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

Permite Division of Whittaker
Lab No.: 34151-12/Barrell Grid #5 Area 5'

-2-

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
2-Diphenylhydrazine	ND	1.0
fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Trobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Benanthrene	ND	1.0
Pyrene	ND	1.0
2,4-Trichlorobenzene	ND	1.0

ACID EXTRACTABLE PRIORITY POLLUTANTS:

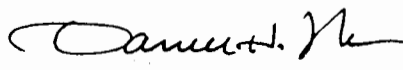
2-Chlorophenol	ND	1.0
4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
3-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
Pentachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

1 mg/kg = ppm

Very truly yours,
MIL ENVIRONMENTAL, INC.

May Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-12

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

REPORT OF ANALYSIS


Compound	ug/kg	Detection Limit ug/kg	Compound	ug/kg	Detection Limit ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-13

Termite Division of Whittaker
116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990


HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS


Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Bismuth	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	ND	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	ND	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	ND	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL


Jeanine Egner, B.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

JF/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-13

Armite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
1-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
1-benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

Lermite Division of Whittaker
Lab No.: 34161-13/Barrell Grid #5 Area 10'

-2-

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
1-Naphthalene	ND	1.0
1-Trobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Benanthrene	ND	1.0
Pyrene	ND	1.0
2,4-Trichlorobenzene	ND	1.0

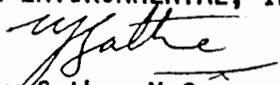
ACID EXTRACTABLE PRIORITY POLLUTANTS:


2-Chlorophenol	ND	1.0
4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
1-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
1,2,4-Trichlorophenol	ND	5.0
1-Enol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
L. L. ENVIRONMENTAL, INC.


Gay Sathe, M.S.
Environmental Chemist
US/DHN:mth


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-13

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #5 Area 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS

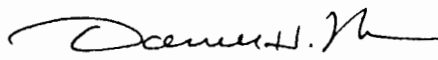
Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-14

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

MAR 18 1991

Sample Description: Barrell Grid #17 Area 3'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Detection				Detection			
Test Results		TTLC	Limit	Test Results		TTLC	Limit
	mg/kg	mg/kg	mg/kg	Parameters	mg/kg	mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	19	2,400	10
Bismuth	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Cyanide	-	18,000	100				
Cadmium	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	10	2,000	10				

Not detected at or above the
concentration of the detection limit.

/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Elaine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Laboratory Director

DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-14

Bermite Division of Whittaker
24116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #17 Area 3'
Sampled By: Hal Hansen
Date Sampled: December 13, 1990
Date Received: December 14, 1990

Date Extracted: December 16, 1990
Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Acridine	ND	5.0
Anthracene	ND	1.0
Benzidine	ND	5.0
Benz(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Dibenz(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dibutylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

Bermite Division of Whittaker -2-
Lab No.: 34161-14/Barrell Grid #17 Area 3'

January 3, 1991

Concentration
mg/kg

Detection Limit
mg/kg

Compound
BASE/NEUTRAL EXTRACTABLE-
PRIORITY POLLUTANTS:

2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di n-octylphthalate	ND	1.0
1,4-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
1,4-dichlorobenzene	ND	1.0
1,4-dichlorobutadiene	ND	1.0
1,2,3,4,5-pentachlorocyclopentadiene	ND	2.0
1,1,1-trichloroethane	ND	1.0
1,2,3,4,6-pentachloro(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
1,2,3,4-tetrahydronaphthalene	ND	1.0
Nitrobenzene	ND	1.0
1-Nitrosodimethylamine	ND	1.0
1-Nitrosodi-N-propylamine	ND	1.0
1-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,3,4,5-pentachlorobenzene	ND	1.0

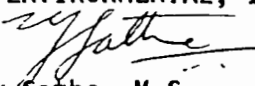
ACID EXTRACTABLE PRIORITY POLLUTANTS:

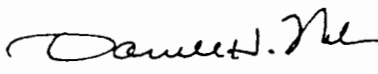
1-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
2,4-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
3-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
5-Methylphenol	ND	5.0
6-Methylphenol	ND	5.0
1-Chloro-m-cresol	ND	2.0
1,2,3-Trichlorophenol	ND	5.0
2,4,6-Trichlorophenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,6-Trichlorophenol	ND	1.0

D = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
G. ENVIRONMENTAL, INC.


Darrell H. Nelson
Environmental Chemist
S/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-14

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #17 Area 3'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

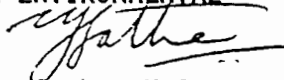
REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-15

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #22 Area 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS

Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0


ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist

US/DHN:mlh


Darrell H. Nelson
Laboratory Director



ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-15

Bermite Division of Whittaker
116 West Soledad Canyon Road
Fergus, California 91350

Sample Description: Barrell Grid area #22/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
PASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benzidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
bis(2-Chloroethoxy)methane	ND	1.0
bis(2-Chloroethyl)ether	ND	1.0
bis(2-Chloroisopropyl)ether	ND	1.0
bis(2-Ethylhexyl)phthalate	ND	1.0
2-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
2-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Dibenzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

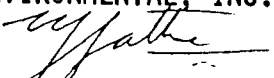
January 3, 1991

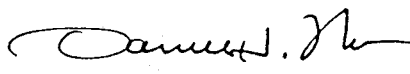
Compound	Concentration mg/kg	Detection Limit mg/kg
SE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Iophorone	ND	1.0
1-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Fluoranthrene	ND	1.0
Fluorene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
1-Chloro-m-cresol	ND	2.0
Pentachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
EGL ENVIRONMENTAL, INC.


Uday Sathe, M.S.
Environmental Chemist
EGL/DHN:mth


Darrell H. Nelson
Laboratory Director



ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-15

Bermite Division of Whittaker
22116 West Soledad Canyon Road
August, California 91350

Sample Description: Barrell Grid #22 Area 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

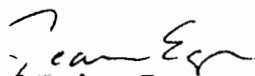
HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

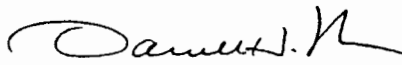
Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	15	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	12	2,500	10				
Fluoride	-	18,000	100				
Lead	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	10	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL


Jeanine Egner, B.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

JL/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-16

Permite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #22 Area 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	15	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	10	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Janine Egner
Janine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

JE/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161-16

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Augustus, California 91350

Sample Description: Barrell Grid #22 Area 10'
Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Analyzed: January 11, 1991

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS

Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL

Uday Sathe
Uday Sathe, M.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

US/DHN:m1h



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161-16

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid Area #22/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: January 10, 1991

Date Analyzed: January 17, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
SE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
1-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
1-benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,3-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0

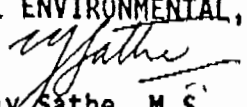
ACID EXTRACTABLE PRIORITY POLLUTANTS:


1-Chlorophenol	ND	1.0
1,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
2,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
3-Methylphenol	ND	1.0
3-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
o-antachlorophenol	ND	5.0
o-phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
GL ENVIRONMENTAL, INC.


Day Satche, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-17

Permite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #46 Area 5'
Sampled By: Hal Hansen
Date Sampled: December 13, 1990
Date Received: December 14, 1990

Date Extracted: December 17, 1990
Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Bismuth	ND	10,000	50	Thallium	ND	700	5
Barium	ND	75	0.5	Vanadium	19	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	13	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Jeanine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Laboratory Director

JE/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991

Lab No.: 34161-17

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #46 Area 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Analyzed: January 11, 1991

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

REPORT OF ANALYSIS

Compound	ug/kg	Detection Limit ug/kg	Compound	ug/kg	Detection Limit ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the concentration of the detection limit.

ug/kg = ppb

Very truly yours,

FGL ENVIRONMENTAL

Uday Sathe, M.S.
Environmental Chemist

US/DHN:mlh

Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161-17

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid Area #46 @ 5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: January 10, 1991

Date Analyzed: January 17, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
SE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
1-benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
1-methylphthalate	ND	1.0
1-n-butylphthalate	ND	1.0

Bermite Division of Whittaker -2-
Lab No.: 34151-17/Barrell Grid #46 Area 5'

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,4-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Heptachlorobenzene	ND	1.0
Heptachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Heptachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0


ACID EXTRACTABLE PRIORITY POLLUTANTS:


2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,5-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
Pentachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
F L ENVIRONMENTAL, INC.


Lay Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-18

Barmitte Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid #46 Area 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
		mg/kg	mg/kg			mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	68	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	22	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	10	2,500	10				
Fluoride	-	18,000	100				
Lead	6	1,000	4				
Mercury	ND	20	0.1				
Niobium	ND	3,500	100				
Nickel	18	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Janine Egner
Janine Egner, B.S.
Environmental Chemist

Darrrell H. Nelson
Darrrell H. Nelson
Laboratory Director

JF/DHN:m1h



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161-18

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Augustus, California 91350

Sample Description: Barrell Grid #46 Area 10'
Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Analyzed: January 11, 1991

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS

Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL

Uday Sathe, M.S.
Environmental Chemist

Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 17, 1991
Lab No.: 34161-18

Bermite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Barrell Grid Area #46 @ 10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: January 10, 1991

Date Analyzed: January 17, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
SE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Acilene	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
bis(2-Chloroethoxy)methane	ND	1.0
bis(2-Chloroethyl)ether	ND	1.0
bis(2-Chloroisopropyl)ether	ND	1.0
bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
1-benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
1-methylphthalate	ND	1.0
1-n-butylphthalate	ND	1.0

Bumite Division of Whittaker
Lab No.: 34151-18/Barrell Grid #46 Area 10'

-2-

January 3, 1991

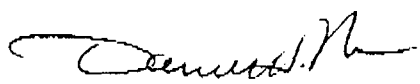
Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
Pentachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
F L ENVIRONMENTAL, INC.

Way Sathé, M.S.
Environmental Chemist
US/DHN:m1h


Darrell H. Nelson
Laboratory Director

APPENDIX G

Laboratory Data Sheets for the Soil Samples Collected From the Building 228 Area



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Visalia, California 91350

Sample Description: Paint Spill Grid #2/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	19	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	16	2,500	10				
Fluoride	-	18,000	100				
Lead	8	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	18	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Janine Egner
Janine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

J /DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991

Lab No.: 34161-1

Bermite Division of Whittaker
2 116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #2/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Acridine	ND	5.0
Anthracene	ND	1.0
Benzidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	1.3	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
1-Chloronaphthalene	ND	1.0
1-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Dibenzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
2,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0

Bermite Division of Whittaker
Lab No.: 34161-1/Paint Spill Grid #3/5'

-2-

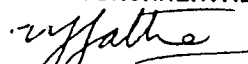
January 3, 1991

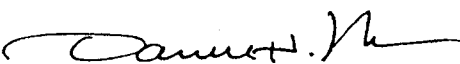
Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
1,2,4-Trichlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
JUL ENVIRONMENTAL, INC.


Jay Sathe, M.S.
Environmental Chemist
JES/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-1

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #2/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:m1h



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-2

Prime Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #2/10'
Sampled By: Hal Hansen
Date Sampled: December 13, 1990
Date Received: December 14, 1990

Date Extracted: December 17, 1990
Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
		mg/kg	mg/kg			mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Bismuth	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	19	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	12	2,500	10				
Fluoride	-	18,000	100				
Lead	6	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	14	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Janine Egner
Janine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

JH'DHN:mlh

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Benzo(a)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
1-phthalene	ND	1.0
1-trobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
1-Nitrosodi-N-propylamine	ND	1.0
1-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
2,4-Trichlorobenzene	ND	1.0

ACID EXTRACTABLE PRIORITY POLLUTANTS:


Chlorophenol	ND	1.0
4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
6-Dinitro-o-cresol	ND	5.0
4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
1-Nitrophenol	ND	1.0
2-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
2,4,6-Trichlorophenol	ND	5.0
1-phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
GL ENVIRONMENTAL, INC.

Jay Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-2

Termite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #2/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
USE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
Chloroaniline	ND	2.0
Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Benzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-2

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #2/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-3

Hermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
		mg/kg	mg/kg			mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	17	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	16	2,500	10				
Fluoride	-	18,000	100				
Lead	6	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	14	2,000	10				

N = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Jean Egner
Jeanine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

JH/DHN:mlh

Bermite Division of Whittaker
Lab No.: 34161-3/Paint Spill Grid #5/5'

-2-

January 3, 1991

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0

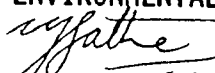
ACID EXTRACTABLE PRIORITY POLLUTANTS:


2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
2,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
1,2-Dichlorophenol	ND	5.0
1,3-Dichlorophenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
MIL ENVIRONMENTAL, INC.


Jay Sathe, M.S.
Environmental Chemist
HIS/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991

Lab No.: 34161-3

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Benaphthene	ND	1.0
Benaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Azidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
bis(2-Chloroethoxy)methane	ND	1.0
bis(2-Chloroethyl)ether	ND	1.0
bis(2-Chloroisopropyl)ether	ND	1.0
bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenyl phenylether	ND	1.0
Butyl benzyl phthalate	ND	1.0
-Chloroaniline	ND	2.0
-Chloronaphthalene	ND	1.0
4-Chlorophenyl phenylether	ND	1.0
Chrysene	ND	1.0
Di benzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-3

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

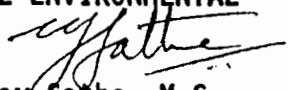
VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS

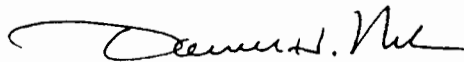
Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-4

Interstate Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results	Detection		Parameters	Test Results	Detection	
		TTL	Limit			TTL	Limit
	mg/kg	mg/kg	mg/kg		mg/kg	mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	75	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	28	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	14	2,500	10				
Fluoride	-	18,000	100				
Lead	8	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	20	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Jeanine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Laboratory Director

JH DHN:mlh

Bermite Division of Whittaker
Lab No.: 34161-4/Paint Spill Grid #5/10'

-2-

January 3, 1991

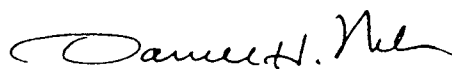
Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,1'-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,5-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
p-Atachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
F L ENVIRONMENTAL, INC.

Uday Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-4

Permite Division of Whittaker
2116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
USE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Azidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
2-Chloroaniline	ND	2.0
1-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Benzo(a,h)anthracene	ND	1.0
2-Benzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-4

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #5/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990


VOLATILE ORGANICS IN SOIL (GC/MS) EPA METHOD 8240 REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-5

Bermite Division of Whittaker
24116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	14	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	12	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Leanne Egner
Leanne Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

JE DHN:mlh

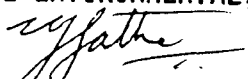
January 3, 1991

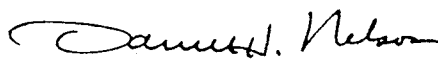
Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,1'-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,5-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
p-Atachlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
F... ENVIRONMENTAL, INC.


U. S. Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-5

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
EASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benazidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
1-benzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-5

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/5'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990
Lab No.: 34161-6

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

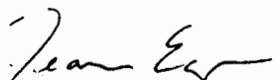
HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS


Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTLc mg/kg	Limit mg/kg			TTLc mg/kg	Limit mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	11	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	4	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	ND	2,000	10				

N = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL


Jeanine Egner, B.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

J /DHN:mlh


January 3, 1991

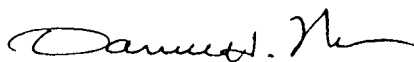
Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
2,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
1,2,4-Trichlorophenol	ND	5.0
Phenol	ND	1.0
2,4,5-Trichlorophenol	ND	1.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
MEL ENVIRONMENTAL, INC.


May Sathe, M.S.
Environmental Chemist
HIS/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-6

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Benaphthene	ND	1.0
Benaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Azidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenyl phenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
4-Chloronaphthalene	ND	1.0
4-Chlorophenyl phenylether	ND	1.0
Chrysene	ND	1.0
Dibenzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-6

Bermite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #9/10'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

REPORT OF ANALYSIS

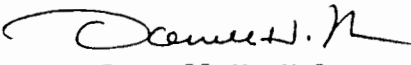
Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-7

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #10/3'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

HAZARDOUS WASTE CHARACTERIZATION REPORT OF ANALYSIS

Parameters	Test Results mg/kg	Detection		Parameters	Test Results mg/kg	Detection	
		TTL	Limit			TTL	Limit
		mg/kg	mg/kg			mg/kg	mg/kg
Antimony	ND	500	10	Selenium	ND	100	0.5
Arsenic	ND	500	3	Silver	ND	500	3
Barium	ND	10,000	50	Thallium	ND	700	5
Beryllium	ND	75	0.5	Vanadium	13	2,400	10
Cadmium	ND	100	0.5	Zinc	ND	5,000	100
Chromium (VI)	-	500	3				
Chromium (Total)	ND	2,500	50				
Cobalt	ND	8,000	50				
Copper	ND	2,500	10				
Fluoride	-	18,000	100				
Lead	5	1,000	4				
Mercury	ND	20	0.1				
Molybdenum	ND	3,500	100				
Nickel	11	2,000	10				

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
FGL ENVIRONMENTAL

Jean Egner
Jeanine Egner, B.S.
Environmental Chemist

Darrell H. Nelson
Darrell H. Nelson
Laboratory Director

J DHN:mlh

Bermite Division of Whittaker
Lab No.: 34151-7/Paint Spill Grid #10/3'

-2-

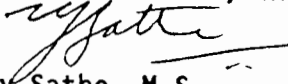
January 3, 1991


Compound	Concentration mg/kg	Detection Limit mg/kg
BASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
2,4-Dinitrotoluene	ND	1.0
2,6-Dinitrotoluene	ND	1.0
Di-n-octylphthalate	ND	1.0
1,2-Diphenylhydrazine	ND	1.0
Fluoranthene	ND	1.0
Fluorene	ND	1.0
Hexachlorobenzene	ND	1.0
Hexachlorobutadiene	ND	1.0
Hexachlorocyclopentadiene	ND	2.0
Hexachloroethane	ND	1.0
Indeno(1,2,3-c,d)pyrene	ND	1.0
Isophorone	ND	1.0
2-Methylnaphthalene	ND	1.0
Naphthalene	ND	1.0
Nitrobenzene	ND	1.0
N-Nitrosodimethylamine	ND	1.0
N-Nitrosodi-N-propylamine	ND	1.0
N-Nitrosodiphenylamine	ND	1.0
2-Nitroaniline	ND	5.0
3-Nitroaniline	ND	5.0
4-Nitroaniline	ND	5.0
Phenanthrene	ND	1.0
Pyrene	ND	1.0
1,2,4-Trichlorobenzene	ND	1.0
ACID EXTRACTABLE PRIORITY POLLUTANTS:		
2-Chlorophenol	ND	1.0
2,4-Dichlorophenol	ND	1.0
2,4-Dimethylphenol	ND	1.0
4,6-Dinitro-o-cresol	ND	5.0
2,4-Dinitrophenol	ND	5.0
2-Methylphenol	ND	1.0
4-Methylphenol	ND	1.0
2-Nitrophenol	ND	1.0
4-Nitrophenol	ND	5.0
p-Chloro-m-cresol	ND	2.0
2,4,5-Trichlorophenol	ND	5.0
2,4,6-Trichlorophenol	ND	1.0

ND = Not detected at or above the
concentration of the detection limit.

mg/kg = ppm

Very truly yours,
M. L. ENVIRONMENTAL, INC.


M. L. Sathe, M.S.
Environmental Chemist
US/DHN:mlh


Darrell H. Nelson
Laboratory Director



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

January 3, 1991
Lab No.: 34161-7

Ermita Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #10/3'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 16, 1990

Date Analyzed: January 2, 1991

EPA METHOD 8270 REPORT OF ANALYSIS

Compound	Concentration mg/kg	Detection Limit mg/kg
EASE/NEUTRAL EXTRACTABLE- PRIORITY POLLUTANTS:		
Acenaphthene	ND	1.0
Acenaphthylene	ND	1.0
Aniline	ND	5.0
Anthracene	ND	1.0
Benzidine	ND	5.0
Benzo(a)anthracene	ND	1.0
Benzo(a)pyrene	ND	1.0
Benzo(b)fluoranthene	ND	1.0
Benzo(k)fluoranthene	ND	1.0
Benzo(g,h,i)perylene	ND	1.0
Benzyl Alcohol	ND	2.0
Bis(2-Chloroethoxy)methane	ND	1.0
Bis(2-Chloroethyl)ether	ND	1.0
Bis(2-Chloroisopropyl)ether	ND	1.0
Bis(2-Ethylhexyl)phthalate	ND	1.0
4-Bromophenylphenylether	ND	1.0
Butylbenzylphthalate	ND	1.0
4-Chloroaniline	ND	2.0
2-Chloronaphthalene	ND	1.0
4-Chlorophenylphenylether	ND	1.0
Chrysene	ND	1.0
Benzo(a,h)anthracene	ND	1.0
Dibenzofuran	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
3,3'-Dichlorobenzidine	ND	2.0
Diethylphthalate	ND	1.0
Dimethylphthalate	ND	1.0
Di-n-butylphthalate	ND	1.0



FGL ENVIRONMENTAL

ANALYTICAL CHEMISTS

December 27, 1990

Lab No.: 34161-7

Permite Division of Whittaker
22116 West Soledad Canyon Road
Saugus, California 91350

Sample Description: Paint Spill Grid #10/3'

Sampled By: Hal Hansen

Date Sampled: December 13, 1990

Date Received: December 14, 1990

Date Extracted: December 17, 1990

Date Analyzed: December 26, 1990

VOLATILE ORGANICS IN SOIL (GC/MS)

EPA METHOD 8240

REPORT OF ANALYSIS


Compound	Detection Limit		Compound	Detection Limit	
	ug/kg	ug/kg		ug/kg	ug/kg
Benzene	ND	5.0	1,1-Dichloroethene	ND	5.0
Bromodichloromethane	ND	5.0	trans-1,2-Dichloroethene	ND	5.0
Bromoform	ND	5.0	1,2-Dichloropropane	ND	5.0
Bromomethane	ND	10.0	cis-1,3-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0	trans-1,3-Dichloropropene	ND	5.0
Chlorobenzene	ND	5.0	Ethyl Benzene	ND	5.0
Chloroethane	ND	10.0	Methylene Chloride	ND	5.0
Chloroform	ND	5.0	1,1,2,2-Tetrachloroethane	ND	5.0
Chloromethane	ND	10.0	Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0	Toluene	ND	5.0
1,2-Dichlorobenzene	ND	5.0	1,1,1-Trichloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0	1,1,2-Trichloroethane	ND	5.0
1,4-Dichlorobenzene	ND	5.0	Trichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0	Trichlorofluoromethane	ND	5.0
1,2-Dichloroethane	ND	5.0	Vinyl Chloride	ND	10.0
			Xylenes	ND	5.0

ND = Not Detected at or above the
concentration of the detection limit.

ug/kg = ppb

Very truly yours,
FGL ENVIRONMENTAL


Uday Sathe, M.S.
Environmental Chemist


Darrell H. Nelson
Laboratory Director

US/DHN:mlh

CHAIN OF CUSTODY

Page 1 of 1



Delta
Environmental
Consultants, Inc.

Delta Environmental
Consultants, Inc.
3330 Data Drive, Suite 100
Rancho Cordova, CA 95670
916/638-2085 • FAX 916/638-8385

LABORATORY SAMPLES SENT TO: 16L

Santa Paula

ADDRESS: Santa Paula

PROJ. NO. _____
PROJECT NAME: Bermite Santa Clara
PROJECT LOCATION: 22116 West Soledad Canyon Road
PROJECT MANAGER: Michael O'Brien

SAMPLERS (Signature)

Hal Hansen

LABORATORY SAMPLE ID	SAMPLE ID	DATE	TIME	SAMPLE TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	Analysis Requested & Container Description	REMARKS
	B-1-1	12-13-90	725	soil	Paint spill Grid #2 5'	1	8260	on ice
	B-1-2		740		Paint spill Grid #2 10'	1	8270	
	B-2-1		800		Paint spill Grid #5 5'	1	CAM	
	B-2-2		815		Paint spill Grid #5 10'	1	metals	
	B-3-1		835		Paint spill Grid #9 5'	1		
	B-3-2		850		Paint spill Grid #9 10'	1		
	B-4-1		910		Paint spill Grid #10 3'	1		

Relinquished by: (Signature) Hal Hansen Date 12-13-90 Time 17:11 Received by: (Signature) [Signature] Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____

Relinquished by: (Signature) _____ Date _____ Time _____ Received for Laboratory by: (Signature) _____ Date _____ Time _____ Turnaround Time: regular

Sealed for shipment by: (signature) Hal Hansen Date/Time 12-13-90 520 Shipment method: Courier

Sampler Comments: on ice Laboratory Comments: _____

Condition of Samples: _____

White: Return with analytical results to Delta Yellow: Laboratory Copy Pink: Delta's Copy

APPENDIX H

Summary of the Results of the Chemical Analyses for California Assessment Manual Metals for Background Soil Samples

BACKGROUND AREA METAL CONCENTRATIONS
All Values are mg/kg (ppm)

SAMPLE I.D.	SAMPLE DEPTH(FT)	ANTIMONY	ARSENIC	BARIUM	BERYLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM
BGA-2323-1	0.0-0.5	(10.0	4.0	50	(0.5	(0.5	(50.0	(10.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2323-2	0.5-1.0	(10.0	3.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2323-3	1.0-2.0	(10.0	5.0	76	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	20.0	(0.5	(3.0	(5.0
BGA-2323-4	2.0-3.0	(10.0	(3.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2323-5	3.0-4.0	(10.0	4.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2323-6	4.0-5.0	(10.0	(3.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-1	0.0-0.5	(10.0	5.0	53	(0.5	(0.5	(50.0	(10.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-2	0.5-1.0	(10.0	4.0	(50	(0.5	(0.5	(50.0	(10.0	12.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-3	1.0-2.0	(10.0	4.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-4	2.0-3.0	(10.0	(3.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-5	3.0-4.0	(10.0	5.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-2822-6	4.0-5.0	(10.0	6.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-1	0.0-0.5	(10.0	5.0	52	(0.5	(0.5	(50.0	23.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-2	0.5-1.0	(10.0	4.0	64	(0.5	(0.5	(50.0	(10.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-3	1.0-2.0	(10.0	4.0	(50	(0.5	(0.5	(50.0	14.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-4	2.0-3.0	(10.0	5.0	56	(0.5	(0.5	(50.0	(10.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-5	3.0-4.0	(10.0	4.0	(50	(0.5	(0.5	(50.0	(10.0	4.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-0115-6	4.0-5.0	(10.0	6.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-1	0.0-0.5	(10.0	5.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-2	0.5-1.0	(10.0	6.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-3	1.0-2.0	(10.0	6.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-4	2.0-3.0	(10.0	5.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-5	3.0-4.0	(10.0	5.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
BGA-1223-6	4.0-5.0	(10.0	6.0	(50	(0.5	(0.5	(50.0	(10.0	(3.0	(0.1	(10.0	(0.5	(3.0	(5.0
STATISTICAL ANALYSIS		ANTIMONY	ARSENIC	BARIUM	BERYLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM
DETECTION LIMITS		10.0	3.0	50.0	0.5	0.5	50.0	10.0	3.0	0.1	10.0	0.5	3.0	5.0
NUMBER OF BACKGRND SAMPLES (nb)		24	24	24	24	24	24	24	24	24	24	24	24	24
BACKGROUND MEAN (Xb)		10.000	4.583	52.125	0.500	0.500	50.000	10.708	3.667	0.100	10.417	0.500	3.000	5.000
BACKGROUND VARIANCE (Sb2)		0.000	0.993	33.859	0.000	0.000	0.000	7.207	3.222	0.000	3.993	0.000	0.000	0.000
BACKGROUND POPULATION STD DEV.		0.000	0.997	5.819	0.000	0.000	0.000	2.685	1.795	0.000	1.998	0.000	0.000	0.000
BACKGROUND SAMPLE STD DEV.		0.000	1.018	5.944	0.000	0.000	0.000	2.742	1.834	0.000	2.041	0.000	0.000	0.000

NOTES:

All values less than the detection limits have been given values equal to the detection limit for purposes of calculation

T-Statistic (t*) and the Comparison T-Statistic are not defined when the Sample

Variance (Sm2) and the Background Variance (Sb2) are both equal to zero.

The statistics in this table are defined in 40 CFR Part 264, App. IV—Cochran's Approximation to the Behrens-Fisher Students' T-Test.

"---" = Analysis not run